1/2”SQ DRIVE DIGITAL TORQUE WRENCH WITH ANGLE FUNCTION 20-200NM

MODEL No: **STW306.V2**

Thank you for purchasing a Sealey Product. Manufactured to a high standard this tool will, if used according to these instructions and properly maintained, give years of trouble free performance.

IMPORTANT: **PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS AND CAUTIONS. USE THIS PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. PLEASE KEEP INSTRUCTIONS SAFE FOR FUTURE USE.**

1. SAFETY

- ❑ **WARNING! DO NOT** use the torque wrench if damaged or thought to be faulty.
- ✓ Ensure all workshop safety rules, regulations and conditions are complied with.
- ✓ Maintain correct balance and footing. Ensure the floor is not slippery and wear non-slip shoes.
- ✓ Keep children and unauthorised persons away from the working area.
- ✓ Avoid over-torquing the wrench; 110% of maximum torque range; as this will cause loss of accuracy. "----" will be displayed when this occurs.
- ✓ Keep the wrench away from magnetic fields.
- ✓ On first usage training by a qualified person is recommended.
- ✓ In operation when you hear a continuous tone, cease activity, especially in the case of target torque/angle is low.
- ✓ Ensure all sockets, extensions, drivers are rated correctly and are of flawless construction. Avoid using adaptors/extensions for best safety and best accuracy.
- × **DO NOT** use on electrical circuits, the plastic handle of the wrench is not insulated.
- × **DO NOT** subject the wrench to excessive force, drops, shakes, shocks or knocks.
- × **DO NOT** operate the wrench in damp conditions.
- × **DO NOT** operate the wrench in dusty conditions.
- × **DO NOT** press or grip on the LCD or control panel area.
- × **DO NOT** use the torque wrench if the batteries are low, torque accuracy will be affected.

2. INTRODUCTION

Rugged and resilient digital torque wrench suitable for workshop and factory use. LCD read-out with LED, vibration and audible alarms to indicate achieved and target torque levels. Features angle mode, eliminating the need for angle gauges and protractors providing an accurate and fast way to measure torque plus angle tightening sequences. It will also accumulate angle measurement when multiple turns are required, ideal for use where access is limited. Selectable track or peak modes and up to 5 user preset memories available. Read-outs in Nm, lb.in, lb.ft, kgf.m or degrees. Reversible Chrome Vanadium 72 tooth ratchet allows torque reading in either direction. Accurate to ±2% between 10% and 100% of wrench’s stated capacity. Supplied with test certificate and storage case.

3. SPECIFICATION

3.1 Specification.

Drive: . . . . . ½”Sq
Overall Length:. 610mm
Angle Range: . . . . . 360°
Angle Accuracy: . . . . . ±2%
Torque Range: . . . . . 20 - 200Nm
Torque Range: . . . . . 14.7 - 147.5lb.ft
Torque Range: . . . . . 176.5 - 1770lb.in
Torque Range: . . . . . 2 - 20.4kgf.m
Torque Accuracy: . . . . . ±2%
Battery Qty x Type:. . . . . 4 x AAA (Supplied)
(Clockwise and anti-clockwise of reading, 10% - 100% of full scale)

3.2 Re-calibration.

We recommend, to ensure continued accuracy, the calibration of each wrench should be checked annually, beginning one year after first use. Calibration should also be checked after any impact, over torquing or other misuse. Contact your Sealey stockist to arrange recalibration.

3.3 Repair Kit available.

Part No: STW306.V2-RK
Contact your authorised Sealey stockist.

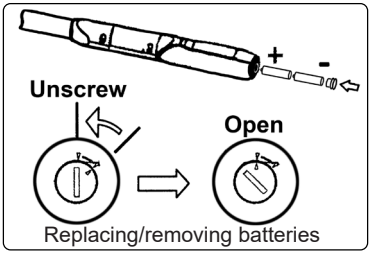
4. OPERATION

4.1 Installing batteries.

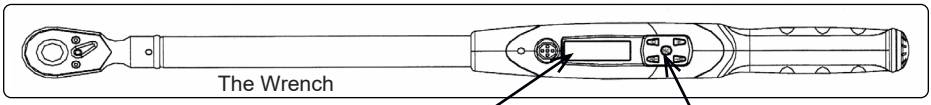
4.1.1 Unscrew the battery compartment cap anti-clockwise

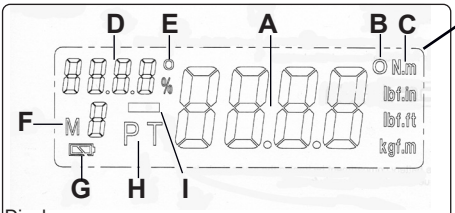
4.1.2 Insert four new AAA size batteries (positive end first) into the compartment. Push the battery cap on against the spring and screw clockwise to lock.

Note: DO NOT mix types of battery, or used and new ones. Keep battery terminals clean. **I**f the battery voltage is low, the battery symbol will be displayed on the screen and soon afterwards, the wrench will turn off. Replace with a new set of 4 batteries.



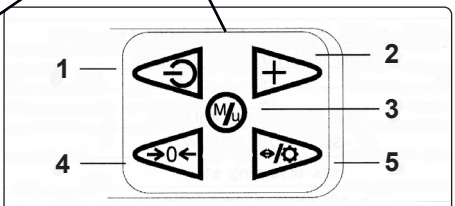
Replacing/removing batteries





Display-:

A:	REAL TIME TORQUE VALUE
B:	THE UNIT OF ANGLE
C:	TORQUE UNITS
D:	TARGET TORQUE INDICATOR
E:	TARGET ANGLE INDICATOR
F:	MEMORY STORAGE NUMBERS
G:	BATTERY INDICATOR
H:	PEAK / TRACK MODE
I :	MINUS SYMBOL A.C.W. ROTATION



Control panel-:

1:	POWER ON/OFF
2:	MEMORY PRESETS/SETTING SELECTION
3:	MEMORIZE TORQUE or ANGLE CHANGE ROTATION
4:	ZERO TORQUE/ANGLE
5:	*BACK LIGHT/NEXT DIGIT SELECT/ ENTER ANGLE MODE

* Hold down for 3 seconds “on” / 2 seconds “off”.

NEW USER NOTES:

Familiarise yourself with the display and control panel. Practice setting up by holding the torque wrench 1/2” drive in a vice. Set units, torque, angle figures and test for visual, audible, vibration signals by sweeping the torque arm.

INITIAL OPERATION:

4.2 Power On.

4.2.1 Place the wrench on a horizontal level surface and press the button to turn on the torque wrench.

4.2.2 Press the button again to turn the wrench off.

SET-UP

4.3 Track Mode: After turning on the torque wrench it will be set in **’track’** mode. This means once the torque is reached and pressure is taken off the torque wrench the display rolls back down to ZERO.

4.4 Peak Hold Mode: Use the wrench in exactly the same way, except that when the force is released, the display stays at the maximum torque that has been applied. After two seconds the display will flash. Either continue on the next operation or press the button to ZERO the value and continue onto the next operation.

4.5 Track and Peak Mode Setting.

4.5.1 Press the button to turn the wrench on.

4.5.2 Cycle the button to select peak or track. Press to confirm.

Note: If no buttons are pressed within 10 seconds the display will return to the main screen.

4.6 Unit Selection.

4.6.1 Press the button for 3 seconds

4.6.2 When the peak or track mode has been confirmed the wrench will go to unit selection.

4.6.3 Nm will be shown, Press the button to scroll through different measurements.

4.6.4 Press the button to confirm.

If no buttons are pressed within 3 seconds the display will return to the main screen.

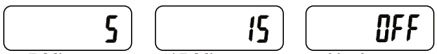
4.6.5 After confirming, the screen will automatically move onto the next setting (Auto Power Off).

4.7 Auto Power Off

4.7.1 When the unit selection has been confirmed the wrench will go to Auto Power Off setting.

4.7.2 On the auto power off screen the default time will be shown (5 minutes).

4.7.3 Press the button to scroll through the settings.



5 Minute | 15 Minutes | No Auto Power Off

4.7.4 To confirm, press the button.

If no buttons are pressed within 3 seconds the display will return to the main screen.

4.7.5 After confirmation, the screen will return to the main screen.

PROGRAMMING THE TORQUE AND ANGLE.

The wrench has the ability to hold 5 torque and angle settings in its memory

4.8 Target Torque Setting

4.8.1 Press button to turn the wrench on.

4.8.2 Press and hold the button for 5 seconds (more if required) to select the memory storage number between **M1 - M5**

4.8.3 Once the memory number is chosen, access the Target Torque by pressing the button.

4.8.4 ' SET' is shown on the screen.

4.8.5 The last saved torque will be shown.

4.8.6 Press the button to ZERO the figures.

4.8.7 Press the button to change each digit in turn, press the button to move between digits.

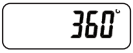
4.8.8 To confirm the torque figure is set, press the button. Setting the angle will proceed.

If no buttons are pressed within 6 seconds the display will continue to the angle setting.

'Erro' will be shown on the screen if the torque set does not fall between 10% and 100% of the range of the wrench.

4.9 Target Angle Setting.

4.9.1 When the torque setting has been confirmed the wrench will go to angle setting.



4.9.2 The last saved angle will be shown.

4.9.3 Press the button to ZERO the figures.

4.9.4 Press the button to change each digit in turn, press the button to move between digits.

4.9.5 When the angle figure is set, press the button to confirm.

If no buttons are pressed within 6 seconds the display will return to the main screen.

'Erro' will be shown on the screen if the angle set does not fall between 1° and 360°.

4.10 Display Back-light.

4.10.1 Press and hold the button for 5 seconds.

4.11 Torque Measurement.

4.11.1 Select the correct size socket and snap it onto the wrench.

4.11.2 Press the button to scroll through the pre-set torque figures (M1-M5).

4.11.3 Place the wrench onto a nut/bolt and begin to tighten, use a smooth motion and avoid jerky movements.

4.12 LED/Buzzer/Vibration Indicators-Torque.

4.12.1 When under 50% of the set torque, the LED will flash GREEN.

4.12.2 After 50% of the torque figure has passed the LED will change to a solid YELLOW.

4.12.3 When +/-5Nm from the set torque the buzzer will sound.

4.12.4 The LED will change to RED when you are within 2% of the set torque and handle vibration will be felt.

4.12.5 When the set torque is reached the buzzer will become quicker.

4.12.6 If you go over the set torque the wrench will emit a continuous tone and the LED will turn back to GREEN and handle vibration will be felt.

4.13 Angle Measurement.

4.13.1 Press the button to switch to angle measurement.

4.13.2 Select the correct size socket and snap it onto the wrench.

4.13.3 Press the button to scroll through the pre-set angle figures (M1-M5).

4.13.4 Place the wrench onto a nut/bolt and begin to tighten, use a smooth motion and avoid jerky movements.

4.13.5 To change the direction from clockwise to anti-clockwise press the button. A minus symbol will appear on the display.

4.14 LED/Buzzer/Vibration indicators - Angle.

4.14.1 When under 50% of the set angle, the LED will flash GREEN.

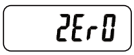
4.14.2 After 50% of the angle figure has passed the LED will change to a solid YELLOW.

4.14.3 The LED will change to RED when you are within 2% of the set angle.

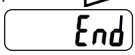
4.14.4 When the set angle is reached the buzzer will emit a continuous tone and handle vibration will be felt.

4.14.5 If you go over the set angle by 2% the LED will turn back to GREEN and handle vibration will be felt.

4.14.6 Press the button to ZERO the angle for another reading. The below will display.



4.14.7 When all angle measurements are done, press the button, the display will show



and switch to torque measurement mode.

5. MAINTENANCE

5.1.× **DO NOT** leave the wrench in a place exposed to excessive heat, humidity or direct sunlight.

5.2.× **DO NOT** use organic solvents such as alcohol or thinners to clean the wrench.

5.3. After use, always turn off. Clean with a soft dry or semi dry cloth, place the dry torque wrench in its storage case, and store in a safe, dry, childproof location.

5.4. If the wrench is not to be used for “long” periods remove the batteries to prevent damage from leaking.

ENVIRONMENT PROTECTION

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.

REGISTER YOUR PURCHASE HERE

WEEE REGULATIONS

Dispose of this product at the end of its working life in compliance with the EU Directive on Waste Electrical and Electronic Equipment (WEEE). When the product is no longer required, it must be disposed of in an environmentally protective way. Contact your local solid waste authority for recycling information.

BATTERY REMOVAL

Under the Waste Batteries and Accumulators Regulations 2009, Jack Sealey Ltd are required to inform potential purchasers of products containing batteries (as defined within these regulations), that they are registered with Valpak’s registered compliance scheme. Jack Sealey Ltd Batteries Producer Registration Number (BPRN) is BPRN00705.

Note: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice. Please note that other versions of this product are available. If you require documentation for alternative versions, please email or call our technical team on technical@sealey.co.uk or 01284 757505.

Important: No Liability is accepted for incorrect use of this product.

Warranty: This product comes with a lifetime guarantee against manufacturing defects.

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TORQUE TOOL CALIBRATION CERTIFICATE

Declaration of Conformance

(in accordance with BS EN ISO 6789-1:2017)[1]

Test machine type/name	TORQUE TESTER
Test machine serial No.	
Test machine calibration date	
Measurement error[2]	±1%

Measurement uncertainty	0.20%
Ambient temperature	26°C
Humidity	52%
Test units: (Nm, lb/ft etc)	Nm

1	Min Torque:	20	Clockwise					
	Max torque:	200						
Target Torque N.m	Maximum Permissible Deviation (± 4 %) N.m		Completed test reading[3]					
	Min	Max	1	2	3	4	5	Average
40	38.40	41.60						
120	115.20	124.80						
200	192.00	208.00						

2	Min Torque:	20	Anti-clockwise (This part 2 to be completed only where applicable)					
	Max torque:	200						
Target Torque N.m	Maximum Permissible Deviation (± 4 %) N.m		Completed test reading[3]					
	Min	Max	1	2	3	4	5	Average
40	38.40	41.60						
120	115.20	124.80						
200	192.00	208.00						

Tool Model Number	STW306
Tool Serial Number	
Tested by (print name)	
Date of test[4]	

Notes: [1] Testing is in compliance with International Standard procedures, with test equipment calibrated by a laboratory traceable to International Standards.

[2] Measurement error shall be less than ¼ of the maximum permissible relative deviation of the torque tool.

[3] The observed values fall within the maximum permissible deviation (tolerance). For tools with a flexible head, the result is valid only if the measuring axis is perpendicular to the axis of the tool.

[4] This Sealey Declaration of Conformance is issued at the time of manufacture. Its' validity is open ended until the torque tool is used for the first time. The default re-calibration period of 12 months (or 5,000 cycles, whichever occurs first) starts after first use of the torque tool (BS EN ISO 6789-1:2017, clause 5.3 refers).