



# INSTRUCTIONS FOR: TORQUE WRENCHES

MODEL No's	STW101	STW1011	STW102	STW103	STW104	STW200	STW201.V2	STW202	STW1012
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Thank you for purchasing a Sealey product. Manufactured to a high standard, this product will, if used according to these instructions and maintained properly, give you years of trouble free performance.

**IMPORTANT:** PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS & CAUTIONS. USE THE 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. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.



Read Instruction  
Manual

## 1. SAFETY

- x Ensure all workshop safety rules, regulations, and conditions are complied with when using the torque wrench.
- ✓ Maintain the wrench in good condition and replace any damaged or worn parts. *Use genuine parts only. Unauthorised parts may be dangerous and will invalidate the warranty.*
- x The wrench is a precision tool, **DO NOT** abuse it. **DO NOT** drop or throw the wrench.
- ✓ Maintain correct balance and footing. Ensure the floor is not slippery and wear non-slip shoes.
- WARNING! DO NOT** use the wrench if damaged or thought to be faulty (contact Service Agent).
- x **DO NOT** use wrench unless you have been instructed in its use by a qualified person.
- x **DO NOT** use any cleaner which might affect the high pressure grease with which the wrench is packed.
- ✓ After use adjust to lowest torque setting (but not below), clean and store in a safe, dry, childproof location.

## 2. INTRODUCTION & SPECIFICATIONS

### 2.1. Introduction

Chrome Vanadium steel ratchet head with smooth action mechanism. Calibration tolerance in accordance with BS EN ISO 6789:2003. Scales graduated in both Nm and lb.in/lb.ft. Wrenches are individually tested to standards with  $\pm 4\%$  accuracy and each wrench is issued with an individually numbered test certificate. Supplied in storage case.

### 2.2. Specifications

Model No.	STW101	STW1011	STW102	STW103	STW104	STW200	STW201.V2	STW202	STW1012
Torque Range (Nm)	5-25	7-112	40-210	70-420	140-700	10-110	30-210	50-560	2-24
Alternative Scale	44-221lb.in	5-83lb.ft	30-155lb.ft	52-310lb.ft	103-516lb.ft	10-80lb.ft	20-150lb.ft	50-400lb.ft	1.47-17.7lb.ft
Drive (sq)	1/4"	3/8"	1/2"	3/4"	3/4"	3/8"	1/2"	3/4"	3/8"
Length (mm)	275	370	460	650	1070	405	490	675	275

## 3. OPERATION

- 3.1. Hold the torque wrench in your left hand (if right handed) so that the required scale on the shaft, just above the hand grip - is uppermost and visible.
- 3.2. Turn the lock screw, in the end of the grip, counter-clockwise to unlock grip (STW201.V2 has a locking plug in the end of the grip - pull ring to unlock).
- 3.3. Turn grip to select torque setting as follows:
  - Required setting - 56Nm
  - Turn grip until top edge is level with the 50Nm line on the shaft scale and the 'zero' on the grip graduation is aligned with the centre line of the shaft scale.
  - Rotate the grip further, clockwise, until the '6' on the grip graduation is aligned with the centre line to give a setting of  $50 + 6 = 56\text{Nm}$ .

**Note: If using the alternative scale (lb.in, lb.ft or kg.m depending on wrench) then each division of the grip graduation is equivalent to the scale increment divided by the number of divisions. For example (STW1011):**  
 The alternative scale is in lb.ft.  
 Scale increments are 5.16lb.ft  
 There are 7 grip divisions.  
 Then each division is  $5.16/7 = 0.74\text{lb.ft}$
- 3.4. Tighten the lock screw at the end of the handle to prevent accidental alteration of the setting.
- 3.5. When tightening the nut/bolt you will feel and hear the wrench mechanism click when the set torque is reached. Immediately stop applying force to the wrench to avoid over-tightening the nut/bolt. The wrench will reset ready for the next application.  
**Note: If wrench is not used for some while, operate it a few times, at a low setting, to ensure that all internal parts are coated in grease.**

## 4. RECALIBRATION

- 4.1 To ensure continued accuracy the wrench should be recalibrated after a suitable period, depending on use and after any impact or other misuse. Contact your Sealey stockist or a NAMAS accredited laboratory.

Pounds Feet (lb.ft)	Kilogram Meters (kgm)	Newton Meters (Nm)	Newton Meters (Nm)	Pounds Feet (lb.ft)	Kilogram Meters (kgm)	Kilogram Meters (kgm)	Newton Meters (Nm)	Pounds Feet (lb.ft)
5	0.69	6.78	10	7.38	1.02	1	9.81	7.23
10	1.38	13.56	20	14.75	2.04	2	19.61	14.47
15	2.07	20.34	30	22.13	3.06	3	29.43	21.70
20	2.76	27.12	40	29.50	4.08	4	39.23	28.93
25	3.46	33.90	50	36.88	5.10	5	49.04	36.17
30	4.15	40.68	60	44.26	6.12	6	58.84	43.40
35	4.84	47.46	70	51.63	7.14	7	68.65	50.63
40	5.53	54.24	80	59.01	8.16	8	78.46	47.87
45	6.22	61.02	90	66.38	9.18	9	88.26	65.10
50	6.91	67.80	100	73.76	10.20	10	98.07	72.33
55	7.60	74.58	110	81.14	11.22	11	107.88	79.57
60	8.29	81.36	120	88.51	12.24	12	117.68	86.80
65	8.98	88.14	130	95.89	13.26	13	127.49	94.03
70	9.67	94.92	140	103.26	14.28	14	137.30	101.27
75	10.37	101.70	150	110.64	15.30	15	147.11	108.50
80	11.06	108.48	160	118.02	16.32	16	156.91	115.74
85	11.75	115.26	170	125.39	17.34	17	166.72	122.97
90	12.44	122.04	180	132.77	18.36	18	176.53	130.20
95	13.13	128.82	190	140.14	19.38	19	186.33	137.43
100	13.82	135.60	200	147.52	20.40	20	196.14	144.67
105	14.51	142.38	210	154.90	21.42	21	205.95	151.90
110	15.20	149.16	220	162.27	22.44	22	215.75	159.13
115	15.89	155.94	230	169.65	23.46	23	225.57	166.37
120	16.58	162.72	240	177.02	24.48	24	235.37	173.60
125	17.28	169.50	250	184.40	25.50	25	245.18	180.84
130	17.97	176.28	260	191.78	26.52	26	254.98	188.08
135	18.66	183.06	270	199.15	27.54	27	264.79	195.30
140	19.35	189.84	280	206.53	28.56	28	274.60	202.54
145	20.04	196.62	290	213.91	29.58	29	284.41	209.77
150	20.73	203.40	300	221.29	30.60	30	294.22	217.00
155	21.42	210.18	310	228.57	31.62	31	304.03	224.23
160	22.11	216.96	320	236.05	32.64	32	313.84	231.46
165	22.80	223.74	330	243.43	33.66	33	323.65	238.69
170	23.49	230.52	340	250.81	34.68	34	333.46	245.92
175	24.19	237.70	350	258.30	35.70	35	343.35	253.05
180	24.88	244.08	360	265.68	36.72	36	353.16	260.28
185	25.57	250.86	370	273.06	37.74	37	362.97	267.51
190	26.26	257.64	380	280.44	38.76	38	372.78	274.74
195	26.59	264.42	390	287.82	39.78	39	382.59	281.97
200	27.64	271.20	400	295.20	40.80	40	392.40	289.20
205	28.33	277.98	410	302.58	41.82	41	402.21	296.43
210	29.02	284.76						
215	29.71	291.54						
220	30.40	298.32						
225	31.09	305.10						
230	31.78	311.88						
235	32.47	318.66						
240	33.16	325.44						
245	33.85	332.22						
250	34.54	339.00						
260	35.88	352.56						
270	37.26	366.12						
280	38.64	379.68						
290	40.02	393.24						
300	41.40	406.80						

**TORQUE WRENCH  
UNITS OF MEASUREMENT  
CONVERSION  
TABLES**

## 5. CALIBRATION CERTIFICATE



### TORQUE TOOL CALIBRATION CERTIFICATE

Declaration of Conformance  
(in accordance with BS EN ISO 6789-1:2017)<sup>1</sup>

Test machine type/name	TORQUE TESTER	Measurement uncertainty	0.031kgf.m
Test machine serial No.	4266	Ambient temperature	30 °C
Test machine calibration date	2018/6/20	Humidity	59 %
Measurement error <sup>2</sup>	±1%	Test units: (Nm, lb/ft etc)	Nm

1	Min Torque:	5	<b>Clockwise</b>						
	Max torque:	25							
Test %	Test Load	Tolerance ± 4 % of Test Load		Completed test reading <sup>3</sup>					
		Min	Max	1	2	3	4	5	Average
20%	5	4.80	5.20						
60%	15	14.40	15.60						
100%	25	24.00	26.00						

2	Min Torque:		<b>Anti-clockwise</b>						
	Max torque:		(This part 2 to be completed only where applicable)						
Test %	Test Load	Tolerance ± 4 % of Test Load		Completed test reading <sup>3</sup>					
		Min	Max	1	2	3	4	5	Average
20%	0	0.00	0.00						
60%	0	0.00	0.00						
100%	0	0.00	0.00						

Tool Model Number	STW101
Tool Serial Number	
Tested by (print name)	John Li
Date of test <sup>4</sup>	

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

<sup>2</sup> Measurement error shall be less than ¼ of the maximum permissible relative deviation of the torque tool.

<sup>3</sup> 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.

<sup>4</sup> 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).

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#### 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.

**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.

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

**Warranty:** Guarantee is 12 months from purchase date, proof of which is required for any claim.

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