



INSTRUCTIONS FOR: MICROMETER STYLE TORQUE WRENCHES

Models: STW502 & STW503

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 INSTRUCTIONS

- X Ensure all workshop safety rules, regulations, and conditions are complied with when using 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.

IMPORTANT: No liability is accepted for incorrect use of this equipment. **WARRANTY:** Guarantee is 12 months from purchase date, proof of which will be required for any claim. **INFORMATION:** For a copy of our latest catalogue and promotions call us on 01284 757525 and leave your full name and address, including postcode.

2. INTRODUCTION & SPECIFICATIONS

2.1. Introduction

These torque wrenches are precision tools and each is supplied with a calibration certificate. Torque setting is by means of a micrometer type adjuster and the drive head has a reversible ratchet.

2.2. Specifications

	STW502	STW503
Torque Range (lb.ft)	10-100	30-150
Drive (sq)	3/8"	1/2"

Fig 1



3. OPERATION

- 3.1. Hold torque wrench in left hand (if right handed) so that the scale - on shaft, just above hand grip - is uppermost and visible.
- 3.2. Release the locking mechanism, in the end of the grip, by pulling the locking plug (Fig 1) out until it clicks.
- 3.3. Turn grip to select torque setting, as in the following example:
 - Required setting - 56lb.ft
 - Turn grip until the red indicator line is level with the 50lb.ft line on the scale and the 'zero' on the grip graduation is aligned with the centre line arrow of the scale.
 - Rotate the grip further, clockwise, until the '6' on the grip graduation is aligned with the centre line arrow to give a setting of 50 + 6 = 56lb.ft.
- 3.4. Push the locking plug back into end of handle until it clicks home, 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 wrench to avoid over-tightening the nut/bolt. 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 all internal parts are coated in grease.

4. RECALIBRATION

To ensure continued accuracy the wrench should be recalibrated annually and after any impact or other misuse. Contact an NAMAS accredited laboratory.

5. CALIBRATION CERTIFICATE

See over for the Calibration Certificate for this wrench.

Pounds Feet (lb.ft)	Kilogram Metres (kgm)	Newton Metres (Nm)	Newton Metres (Nm)	Pounds Feet (lb.ft)	Kilogram Metres (kgm)	Kilogram Metres (kgm)	Newton Metres (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	29.42	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	57.87
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	225.56	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	228.67	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	237.30	350	258.19	35.70	35	343.26	253.15
180	24.88	244.08	360	265.58	36.72	36	353.07	260.38
185	25.57	250.86	370	272.96	37.74	37	362.87	267.61
190	26.26	257.64	380	280.34	38.76	38	372.68	274.84
195	26.95	264.42	390	287.72	39.78	39	382.49	282.07
200	27.64	271.20	400	295.10	40.80	40	392.29	289.30
205	28.33	277.98	410	302.48	41.82	41	402.10	296.53
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						
260	35.88	352.56						
270	37.22	366.12						
280	38.56	379.68						
290	39.90	393.24						
300	41.24	406.80						

CONVERSION FORMULAS

- 1 CMKG = 13.887 IN-OZ
- 1 CMKG = 0.8677 IN-LB
- 1 MKG = 7.233 FT-LB
- 1 KpCM = 1 CMKG
- 1 CMKG = 0.98 Nm
- 1 FT/LB = 12 INCH POUNDS
- 1 dNm = 14.161 IN-OZ
- 1 Nm = 8.8507 IN-OZ
- 1 Nm = .73756 FT-LB
- 1 KpM = 1 MKG
- 1 MKG = 9.80665 Nm

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.



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TORQUE WRENCH CALIBRATION CERTIFICATE

Models: **STW502 & STW503**

Serial Number & Certificate Number	
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Test Machine Serial Number	
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Tested By		Date	
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Model No	Test %	Test Load lb.ft	Tolerance $\pm 4\%$ of Test Load		Test Reading lb.ft
Minimum	125%	125	Minimum	Maximum	Completed
10	20%	20	19.2	20.8	
Maximum	60%	60	57.6	62.4	
100	100%	100	96	104	

Model No	Test %	Test Load lb.ft	Tolerance $\pm 4\%$ of Test Load		Test Reading lb.ft
Minimum	125%	187.5	Minimum	Maximum	Completed
30	20%	30	28.8	31.2	
Maximum	60%	90	86.4	93.6	
150	100%	150	144	156	

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