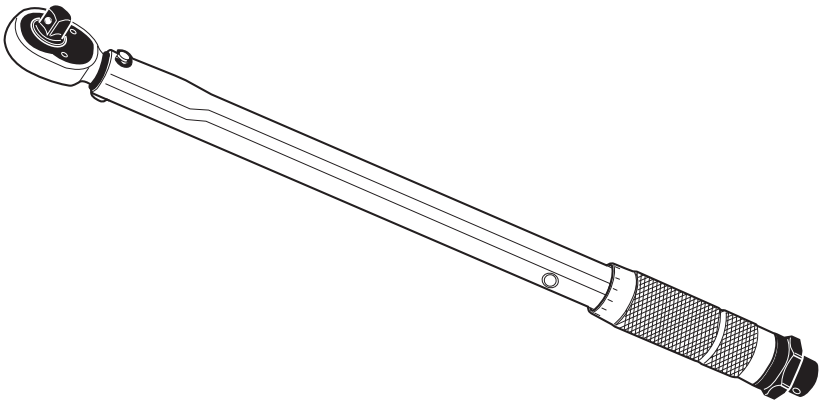
TEKTON

Model # 24350

TORQUE WRENCH

OPERATOR'S MANUAL

STORE THIS MANUAL IN A SAFE PLACE FOR FUTURE REFERENCE





NEED HELP?

888-648-3371

support@tekton.com



Please read and understand entire manual, including all safety information, before using torque wrench. This tool is a precision measuring instrument. Handle with care and store properly. Do not attempt to increase leverage of this wrench with any other device. Failure to follow all instructions could result in damage to torque wrench, property damage, or injury.

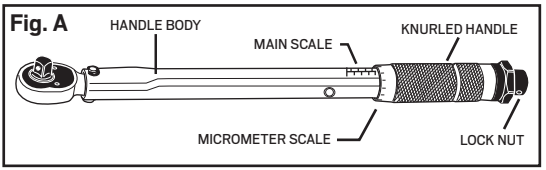
- At low torque settings, pull wrench slowly to observe click.
- Wrench is shipped ready to use, calibrated and tested to an accuracy of +/- 4%. To maintain this accuracy, **it is important that wrench is stored at lowest torque setting, 50 ft.-lb (67.8 Nm).** This setting relieves extra tension on the internal spring, eliminating fatigue that can adversely affect accuracy.

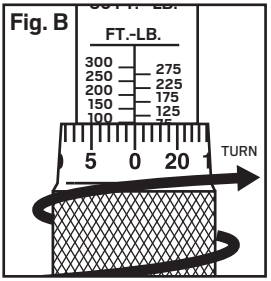
SETTING TORQUE READING

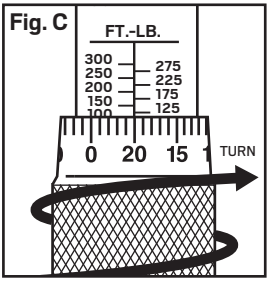
This is a dual-range torque wrench marked with foot pounds (ft.-lb.) and Newton meters (Nm) on opposite sides of handle.

The torque scale is marked on the handle body with more precise subdivisions on the knurled handle **(Fig. A)**. In these instructions the handle body scale will be referred to as the "main scale" and the knurled handle scale will be referred to as the "micrometer scale".

> ⚠ Tighten/adjust lock nut and knurled handle by hand only.







Foot Pounds (Example reading: 120 ft.-lb.)

1. Locate lock nut on the end of handle. Unlock knurled handle by turning lock nut counterclockwise.
2. COARSE SCALE ADJUSTMENT **(Fig. B)**: Using ft.-lb. scale, turn knurled handle until its top edge is even with the horizontal "100" mark on main scale and the "0" mark on micrometer scale is centered on vertical line of main scale.
3. FINE SCALE ADJUSTMENT **(Fig. C)**: The micrometer scale divides the main scale markings into 25 divisions. Every micrometer scale marking equals 1 ft.-lb., also known as the minimum increment. To increase torque from 100 to 120, turn micrometer handle clockwise until "20" mark is centered on vertical line of main scale. 100 ft.-lb. (main scale) + 20 ft.-lb. (micrometer scale) = 120 ft.-lb.
4. Lock torque setting by turning lock nut clockwise until snug. Wrench is now set to measure 120 ft.-lb. of torque and ready to use.

Newton Meters (Example reading: 145 Nm)

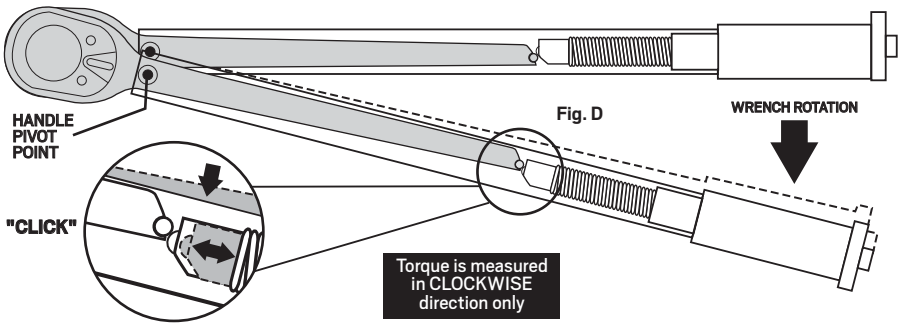
Setting desired torque on the Nm scale uses the same procedure described above for ft.-lb. scale. The micrometer scale divides the main scale markings into 25 divisions. Every micrometer scale marking equals 1.35 Nm, also known as the minimum increment.

To set a torque value of 145 Nm, turn knurled micrometer handle until top is aligned with "135.6" mark on main scale and the "0" mark on micrometer scale is centered on vertical line of main scale. To increase torque from 135.6 to 145, turn micrometer handle clockwise until the "7" mark is centered on vertical line of main scale. 145 Nm - 135.6 Nm = 9.4 Nm. 9.4 Nm / 1.35 Nm = 7 micrometer scale markings. Wrench is now set to measure 145 Nm of torque and ready to use.

WRENCH OPERATION

Fig. D illustrates the basic operation of the torque wrench. For accurate operation, grasp the knurled handle only and apply pulling force. When the desired torque setting is reached, the roller bearing and roller pin will roll over each other, causing a click you can hear and feel. NOTE: At low torque settings, click can be subtle. Use wrench in a quiet environment.

1. Install proper socket/attachment to square drive. Place socket on nut/bolt to be tightened.
2. Operate torque wrench the same as a standard socket wrench to tighten nut/bolt. As nut/bolt becomes snug, slow operation to a smooth, steady pull. Operating wrench too quickly or with too much force may cause you to miss the exact torque setting. At the instant the wrench clicks, torque setting has been reached. Stop pulling wrench and release pressure on handle. Do not continue to pull after torque setting is reached. Doing so will overtighten the nut/bolt and could damage wrench. Once pressure is released from the handle, wrench will automatically reset for next operation. NOTE: At low torque settings, use extra care to release wrench at the proper point after it clicks.
3. Wrench does not measure torque below 50 ft.-lb./67.8 Nm.
4. Do not use wrench to break free stuck fasteners.



MAINTENANCE AND STORAGE

1. If wrench has not been used for a long period of time, operate it several times at a low torque setting. This will allow internal lubricant to recoat moving parts.
2. When wrench is not in use, keep adjustment at lowest torque setting, 50 ft.-lb./ 67.8 Nm **(Fig. E)**. Do not turn handle below lowest torque setting.
3. This wrench is a precision measuring instrument. Take care to operate wrench correctly. Store in a clean, dry environment.
4. Clean wrench by wiping with a clean, dry, lint-free cloth. Do not immerse in any type of liquid or cleaner. This may damage the internal components of the wrench.

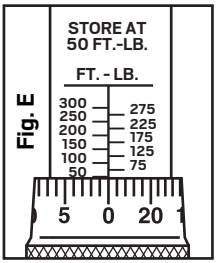


Fig. E

TORQUE UNIT CONVERSION TABLE

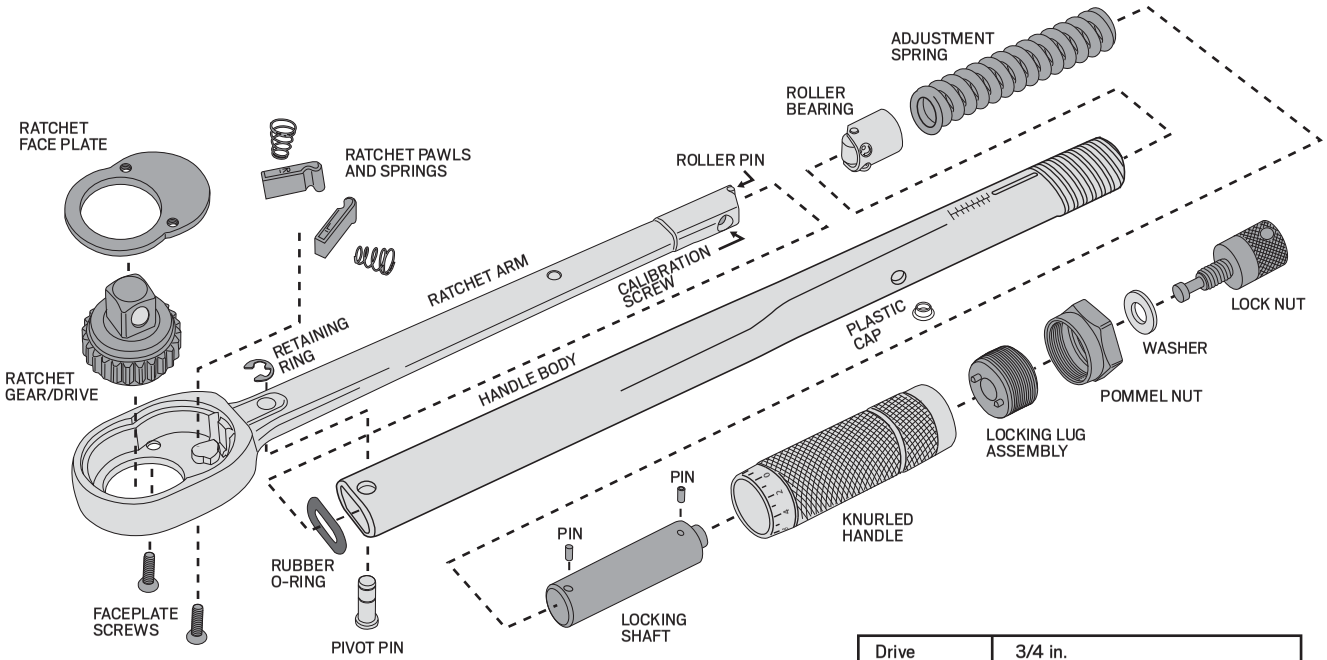
FOOT POUNDS (ft.-lb.)	INCH POUNDS (in.-lb.)	NEWTON METERS (Nm)
5	60	6.78
10	120	13.55
15	180	20.33
20	240	27.11
25	300	33.89
30	360	40.67
35	420	47.45
40	480	54.23
45	540	61.01
50	600	67.79
55	660	74.56
60	720	81.34
65	780	88.12
70	840	94.90
75	900	101.68
80	960	108.46
85	1020	115.24
90	1080	122.02
95	1140	128.80
100	1200	135.58
105	1260	142.36
110	1320	149.13
115	1380	155.91
120	1440	162.69
125	1500	169.47
130	1560	176.25
135	1620	183.03
140	1680	189.81
145	1740	196.59
150	1800	203.37
155	1860	210.15
160	1920	216.93
165	1980	223.70
170	2040	230.48
175	2100	237.26
180	2160	244.04
185	2220	250.82
190	2280	257.60
195	2340	264.38
200	2400	271.16
205	2460	277.94
210	2520	284.72
215	2580	291.50
220	2640	298.27
225	2700	305.05
230	2760	311.83
235	2820	318.61
240	2880	325.39
245	2940	332.17
250	3000	338.95
255	3060	345.73
260	3120	352.51
265	3180	359.29
270	3240	366.07
275	3300	372.84
280	3360	379.62
285	3420	386.40
290	3480	393.18
295	3540	399.96
300	3600	406.74
305	3660	413.52

NEWTON METERS (Nm)	FOOT POUNDS (ft.-lb.)	INCH POUNDS (in.-lb.)
50	36.87	442.53
60	44.25	531.04
70	51.63	619.55
80	59.00	708.06
90	66.38	796.56
100	73.75	885.07
110	81.13	973.58
120	88.50	1062.09
130	95.88	1150.59
140	103.25	1236.10
150	110.63	1327.61
160	118.01	1416.12
170	125.38	1504.62
180	132.76	1593.13
190	140.13	1681.64
200	147.51	1770.15
210	154.88	1858.65
220	162.26	1947.16
230	169.64	2035.67
240	177.01	2124.17
250	184.39	2212.68
260	191.76	2301.19
270	199.14	2389.70
280	206.51	2478.20
290	213.89	2566.71
300	221.26	2655.22
310	228.64	2743.73
320	236.02	2832.23
330	243.39	2920.74
340	250.77	3009.25
350	258.14	3097.76
360	265.52	3186.26
370	272.89	3274.77
380	280.27	3363.28
390	287.64	3451.79
400	295.02	3540.29
410	302.40	3628.80
420	309.77	3717.31
430	317.15	3805.82
440	324.52	3894.32
450	331.90	3982.83

INCH POUNDS (in.-lb.)	FOOT POUNDS (ft.-lb.)	NEWTON METERS (Nm)
25	2.08	2.82
50	4.17	5.65
75	6.25	8.47
100	8.34	11.29
125	10.41	14.12
150	12.50	16.94
175	14.58	19.77
200	16.67	22.59
225	18.75	25.42
250	20.83	28.24
275	22.91	31.07
300	25.00	33.89
325	27.08	36.72
350	29.17	39.54
375	31.25	42.37
400	33.33	45.19
425	35.41	48.01
450	37.50	50.84
475	39.58	53.66
500	41.67	56.49
525	43.75	59.31
550	45.83	62.14
575	47.91	64.96
600	50.00	67.79
625	52.08	70.61
650	54.16	73.44
675	56.25	76.26
700	58.33	79.09
725	60.41	81.91
750	62.50	84.73
775	64.58	87.56
800	66.67	90.38
825	68.75	93.21
850	70.83	96.03
875	72.91	98.86
900	75.00	101.68
925	77.08	104.51
950	79.16	107.33
975	81.25	110.16
1000	83.33	112.98

CONVERSIONS		
1 ft.-lb. =	1 in.-lb. =	1 Nm =
0.138 m-kg	0.0833 ft.-lb.	0.7375 ft.-lb.
12.0 in.-lb.	0.1129 Nm	8.8507 in.-lb.
1.355 Nm	0.0115 m-kg	0.1019 m-kg
13.82 cm-kg	1.1521 cm-kg	10.19 cm-kg

NOTE: Exploded view diagram provided for illustration purposes only. **Do not disassemble any part of torque wrench.** There are no user serviceable parts on or inside wrench. Parts shown and assembly may differ slightly based on model.



Drive	3/4 in.
Ratchet	24 Tooth
Length	26.3 in.
Dual Range	50 - 300 ft.-lb. / 67.8 - 406.7 Nm
Increment	1 ft.-lb. / 1.35 Nm
Accuracy	+/- 4%

TEKTON®
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Made in Taiwan
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