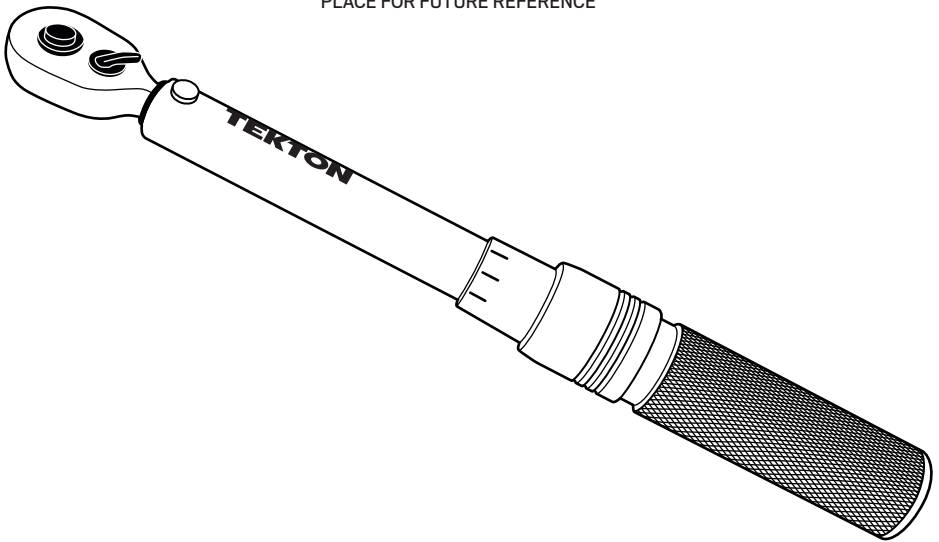


TEKTON®

Model
TRQ-21101

TORQUE WRENCH OPERATOR'S MANUAL

STORE THIS MANUAL IN A SAFE
PLACE FOR FUTURE REFERENCE



NEED HELP?

888-648-3371
support@tekton.com



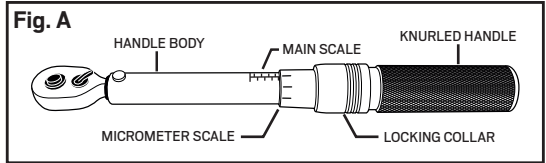
Please read and understand entire manual, including all safety information, before using torque wrench. This tool is a precision measuring instrument. Handle with care and store properly. Do not attempt to increase leverage of this wrench with any other device. Failure to follow all instructions could 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% in CLOCKWISE direction and +/- 6% in COUNTERCLOCKWISE direction. To maintain this accuracy, it is **important that wrench is stored with torque scale at lowest setting, 10 in.-lb (1.1 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 inch pounds (in.-lb.) and Newton meters (Nm) on opposite sides of handle. Wrench measures torque in clockwise and counterclockwise directions.

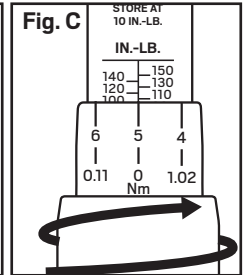
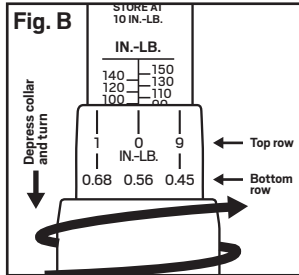
The torque scale is marked on the handle body with more precise subdivisions on the knurled handle (Fig. A). In these instructions the handle body scale will be referred to as the "main scale" and the knurled handle scale will be referred to as the "micrometer scale". The micrometer scale has two rows, top row for in.-lb. and bottom row for Nm.



Inch Pounds (Example reading: 105 in.-lb.)

VIEW TOP ROW OF MICROMETER SCALE

- COARSE SCALE ADJUSTMENT (Fig. B):** Depress and hold the collar down while turning the knurled handle until its top edge is even with the horizontal "100" mark on the main scale and the "0" mark on the micrometer scale is centered on the vertical line of the main scale.



- FINE SCALE ADJUSTMENT (Fig. C):** The micrometer scale's top row divides the main scale markings into 10 divisions. Every micrometer scale marking equals 1 in.-lb., also known as the minimum increment. To increase torque from 100 to 105, turn micrometer handle clockwise until the "5" mark of the top row is centered on the vertical line of the main scale. 100 in.-lb. (main scale) + 5 in.-lb. (micrometer scale) = 105 in.-lb.
- Release collar to lock torque setting. Wrench is now set to measure 105 in.-lb. of torque and ready to use.

Newton Meters (Example reading: 11 Nm)

VIEW BOTTOM ROW OF MICROMETER SCALE

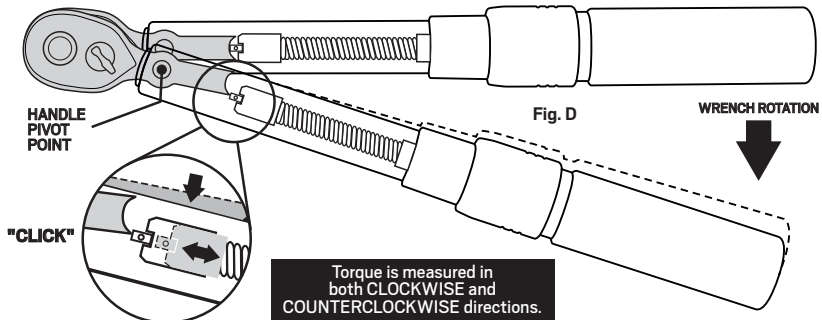
Setting desired torque on the Nm scale uses the same procedure described above for in.-lb. The micrometer scale's bottom row divides the main scale markings into 10 divisions. Every marking equals 0.113 Nm, also known as the minimum increment.

To set a torque value of 11 Nm, turn knurled micrometer handle until top is aligned with "10.1" on main scale and the "0" mark on the bottom row of the micrometer scale is centered on vertical line of main scale. To increase torque from 10.1 to 11, turn micrometer handle clockwise until the 0.90 mark is centered on vertical line of main scale. 10.1 Nm (main scale) + 0.90 Nm (micrometer scale) = 11 Nm. Wrench is now set to measure 11 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.

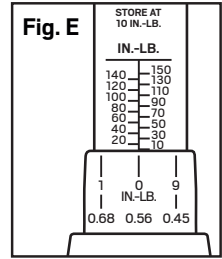
- Install proper socket/attachment to square drive. Place socket on nut/bolt to be tightened.
- Operate torque wrench the same as a standard socket wrench to tighten nut/bolt. As nut/bolt becomes snug, slow operation to a smooth, steady pull. Operating wrench too quickly or with too much force may cause 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.
- Wrench does not measure torque below 10 in.-lb./11 Nm.
- Do not use wrench to break free stuck fasteners.



Torque is measured in both CLOCKWISE and COUNTERCLOCKWISE directions.

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, 10 in.-lb./1.1 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.

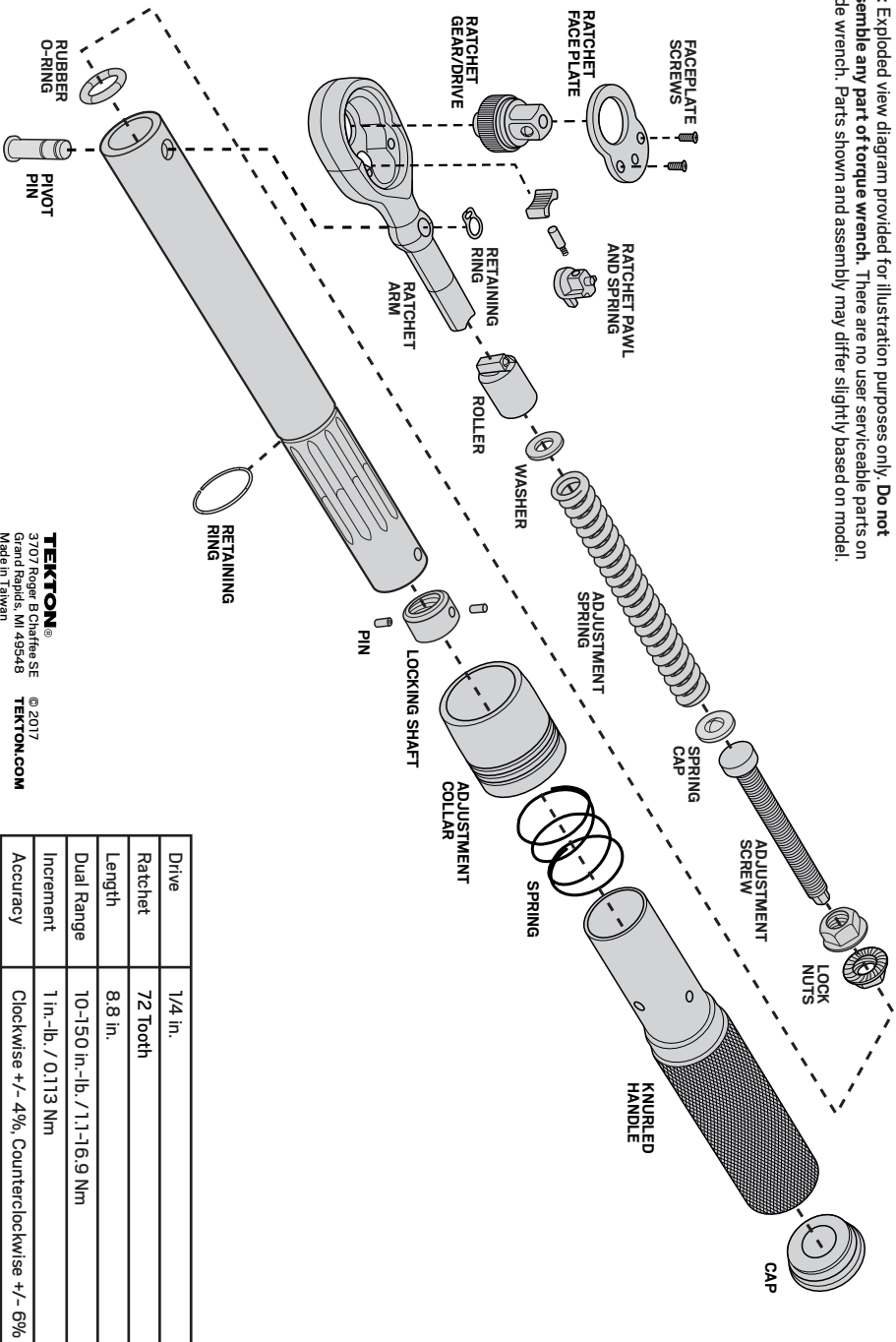


TORQUE UNIT CONVERSION TABLE

INCH POUNDS (in.-lb.)	FOOT POUNDS (ft.-lb.)	NEWTON METERS (Nm)	FOOT POUNDS (ft.-lb.)	INCH POUNDS (in.-lb.)	NEWTON METERS (Nm)	NEWTON METERS (Nm)	INCH POUNDS (in.-lb.)	FOOT POUNDS (ft.-lb.)
5	0.42	0.56	1	12	1.35	1	8.85	0.73
10	0.83	1.13	2	24	2.71	2	17.70	1.47
15	1.25	1.69	3	36	4.06	3	26.55	2.21
20	1.67	2.26	4	48	5.42	4	35.40	2.95
25	2.08	2.82	5	60	6.78	5	44.25	3.68
30	2.50	3.39	6	72	8.13	6	53.10	4.42
35	2.92	3.95	7	84	9.49	7	61.95	5.16
40	3.33	4.52	8	96	10.84	8	70.80	5.90
45	3.75	5.08	9	108	12.20	9	79.65	6.63
50	4.17	5.65	10	120	13.55	10	88.50	7.37
55	4.58	6.21	11	132	14.91	11	97.35	8.11
60	5.00	6.78	12	144	16.27	12	106.20	8.85
65	5.42	7.34	13	156	17.62	13	115.06	9.58
70	5.83	7.91	14	168	18.98	14	123.91	10.32
75	6.25	8.47	15	180	20.33	15	132.76	11.06
80	6.67	9.03	16	192	21.69	16	141.61	11.80
85	7.08	9.60	17	204	23.04	17	150.46	12.53
90	7.50	10.16	18	216	24.40	18	159.31	13.27
95	7.91	10.73	19	228	25.76	19	168.16	14.01
100	8.33	11.29	20	240	27.11	20	177.01	14.75
105	8.75	11.86						
110	9.17	12.42						
115	9.58	12.99						
120	10.00	13.55						
125	10.42	14.12						
130	10.83	14.68						
135	11.25	15.25						
140	11.67	15.81						
145	12.08	16.38						
150	12.50	16.94						
155	12.91	17.51						
160	13.33	18.07						
165	13.75	18.64						
170	14.17	19.20						
175	14.58	19.77						

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

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.



TEKTON®
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 Grand Rapids, MI 49548
 Made in Taiwan

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Drive	1/4 in.
Ratchet	72 Tooth
Length	8.8 in.
Dual Range	10-150 in.-lb. / 1.1-16.9 Nm
Increment	1 in.-lb. / 0.113 Nm
Accuracy	Clockwise +/- 4%, Counterclockwise +/- 6%