

LEXIVON

1/4-INCH DRIVE CLICK TORQUE WRENCH

20-200 in.-lb./2.26-22.6 Nm



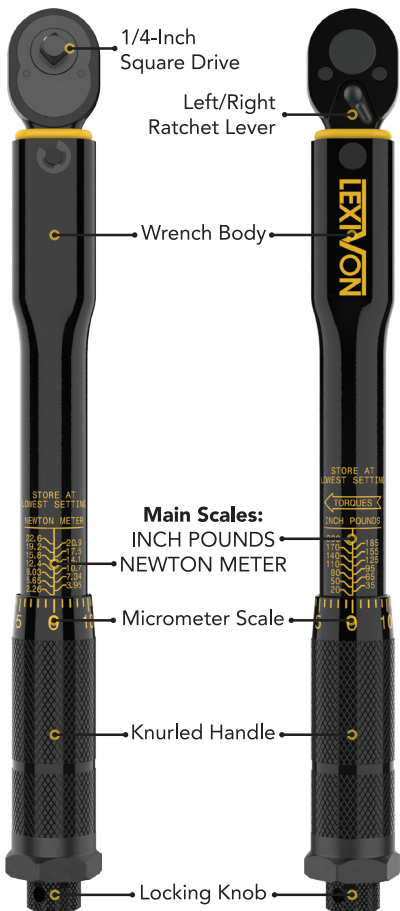
LX-181 USER MANUAL



ATTENTION

- Before using the torque wrench, make sure to read and understand the entire manual, including safety information. Not following the instructions could result in damage to the tool, property, or personal injury.
- Treat this precision measuring tool with care and store it properly. Avoid using any additional devices to increase leverage of this wrench.
- It is recommended to practice first with a non-critical application. Be aware that at low torque settings, the click may be subtle; pull the wrench slowly to observe and learn to recognize the click both audibly and by feel.
- The wrench is calibrated & delivered in a ready-to-use condition. Tested to an accuracy of +/- 4%. To preserve this accuracy, **it's crucial to store the wrench at its lowest torque setting of 20 in.-lb. (2.26 Nm)**. By utilizing this setting, any additional strain on the internal spring is relieved, minimizing fatigue that will impact the wrench's accuracy.

INTRODUCTION



Throughout the instruction manual, the wrench body scale will be referred to as the "main scale," and the knurled handle scale will be referred to as the "micrometer scale". This torque wrench is dual-side marked with **Inch-Pounds (in.-lb.)** and **Newton-Meters (Nm)** on opposite sides of the wrench body.

SETTING TORQUE READING

INCH POUNDS (Example of setting 119 in-lb)

1. Find the locking knob positioned at the end of the knurled handle. Release the knurled handle by rotating the locking knob in a counterclockwise direction.

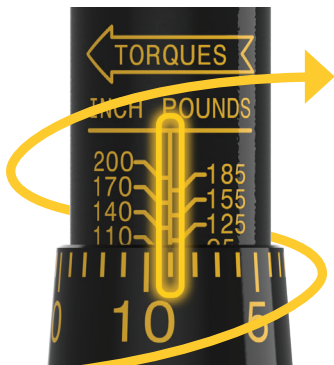


2. Rotate the knurled handle until its top edge aligns with the horizontal "110" mark on the main scale, while the "0" mark on the micrometer scale is centered on the vertical line of the main scale



3. The micrometer scale divides the main scale into 15 divisions, each marking representing 1 in.-lb.

To adjust the torque from 110 to 119 in.-lb., rotate the micrometer handle in a clockwise direction until the "9" mark (9 micro-movements) aligns with the vertical line on the main scale. This adds 9 in.-lb. to the main scale reading of 100 in.-lb., resulting in a total torque of 119 in.-lb.



4. Lock the torque setting by turning the locking knob clockwise until snug. Wrench is now set to measure 119 in.-lb. of torque and ready to use.



NEWTON METERS

To set the desired torque using the Nm scale, follow the same procedure as you would for the in-lb scale.

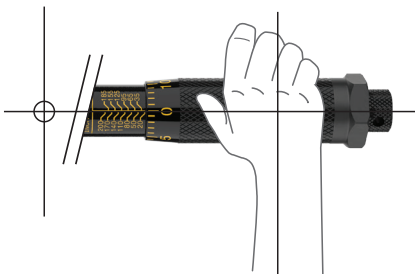
However, It is essential to keep in mind that every mark/increment on the micrometer scale will now represent 0.113 Nm.

Contrasting with the in-lb setting procedure, where each mark on the micrometer scale represents 1 in.-lb., when referring to the Nm setting, the value of each mark on the micrometer scale is 0.113.

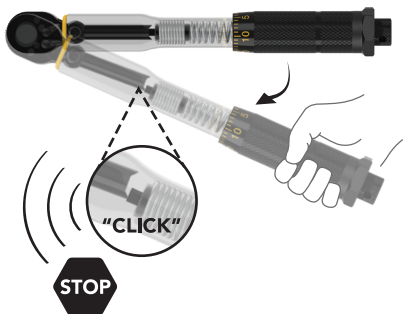
When using the torque wrench's Newton Meter scale, it's crucial to keep this conversion factor in mind. Make sure you calculate each increment as 0.113 Nm to accurately set the desired torque value.

WRENCH OPERATION

1. Install proper socket/attachment on the square drive and apply to nut/bolt. Make sure to keep your tightening hand centered on the knurled handle for accurate results.



2. Operate the wrench to tighten the nut/bolt, gradually increasing the force until they are snug. Slow down your operation and apply a smooth and steady pull. When you hear or feel a 'CLICK' or 'IMPULSE', stop pulling the wrench and release the pressure on the handle.



3. The wrench will automatically reset for the next operation after pressure is released.

SPECIFICATIONS

- Range - In-Lb: 20 ~ 200
- Range - Nm: 2.26 ~ 22.6
- Increment: 1 In-Lb (0.113 Nm)
- Accuracy: ± 4 percent
- Length: 10-7/8 Inch
- Ratchet: Cr-V, 24 tooth gear
- Finish: Electro-Black
- Standard: ASME B107.300
DIN-ISO-6789

**Torque is measured exclusively
in the clockwise direction only.**



IMPORTANT OPERATION NOTICE

Operating the wrench too quickly or with excessive force may lead to missing the precise torque setting. Once the torque setting is reached, do not continue pulling, as this can damage the internal mechanism of the wrench.

At low torque settings, the click may be subtle. It is recommended to use the wrench in a quiet environment and learn to both hear and feel the click for proper torque application.

Do not attempt to use the torque wrench to loosen stuck fasteners. Tighten/adjust the locking knob and the knurled handle by hand only.

Remember, torque is measured exclusively in the clockwise direction.

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MAINTENANCE AND STORAGE

1. If the wrench has not been used for an extended period, operate it several times at a low torque setting. This will allow internal lubricant to recoat internal components.

2. Keep the Torque Wrench at the lowest setting when not in use.

The lowest setting: 20 in.-lb. mark on the main scale and '0' mark on the micrometer scale.

3. **DO NOT** turn handle below lowest torque setting.



This wrench is a precision measuring instrument. Take care and operate correctly. Store in a clean, dry environment. Clean by wiping with a dry, lint-free cloth. Do not immerse in any liquid or cleaner, as it can 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.)
20	1.67	2.26	1	12	1.35	2	17.70	1.47
25	2.08	2.82	2	24	2.71	3	26.55	2.21
30	2.50	3.39	3	36	4.06	4	35.40	2.95
35	2.92	3.95	4	48	5.42	5	44.25	3.68
40	3.33	4.52	5	60	6.78	6	53.10	4.42
45	3.75	5.08	6	72	8.13	7	61.95	5.16
50	4.17	5.65	7	84	9.49	8	70.80	5.90
55	4.58	6.21	8	96	10.84	9	79.65	6.63
60	5.00	6.78	9	108	12.20	10	88.50	7.37
65	5.42	7.34	10	120	13.55	11	97.35	8.11
70	5.83	7.91	11	132	14.91	12	106.20	8.85
75	6.25	8.47	12	144	16.27	13	115.06	9.58
80	6.67	9.03	13	156	17.62	14	123.91	10.32
85	7.08	9.60	14	168	18.98	15	132.76	11.06
90	7.50	10.16	15	180	20.33	16	141.61	11.80
95	7.91	10.73	16	192	21.69	17	150.46	12.53
100	8.33	11.29	17	204	23.04	18	159.31	13.27
105	8.75	11.86	18	216	24.40	19	168.16	14.01
110	9.17	12.42	19	228	25.76	20	177.01	14.75
115	9.58	12.99	20	240	27.11	21	185.86	15.49
120	10.00	13.55	21	252	28.47	22	194.71	16.27
125	10.42	14.12	22	264	29.82	23	203.56	16.96
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						
180	15.00	20.34						
185	15.42	20.90						
190	15.83	21.46						
195	16.25	22.03						
200	16.67	22.59						

CONVERSIONS

1 in.-lb. = 0.0833 ft.-lb. 0.113 Nm 0.0115 m-kg 1.15 cm-kg	1 ft.-lb. = 0.138 m-kg 12.0 in.-lb. 1.35 Nm 13.8 cm-kg	1 Nm = 0.737 ft.-lb. 8.85 in.-lb. 0.102 m-kg 10.2 cm-kg
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CAUTION:

PRECISION TOOL - Do not use for extreme operation like breaking loose stuck fasteners.

PRACTICE FIRST - Try wrench on a non-critical fastener first to learn how it works.

OPERATE SLOWLY - Wrench “clicks” to notify when torque value is reached. Wrench does not stop applying force automatically.

LISTEN AND FEEL - At low torque settings clicks is subtle. Learn to hear and feel the click.

STORE AT LOWEST SETTING - To maintain calibration, set wrench to lowest torque value before storage.

MEASURES IN ONE DIRECTION - Wrench only measures torque in right hand (clockwise) direction.

LEXIVON HAS YOU COVERED

**THE LX-181 MEASURING INSTRUMENT INCLUDES
A STANDARD 1-YEAR WARRANTY**

**TO EXTEND THE WARRANTY
FOR A TOTAL OF 2 YEARS**

*Simply register your new product online
within 90 days of purchase register at:*

www.lexivon.com/product-registration



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