

SPECIFICATIONS

Model No.	44593	44594	44595
Drive:	3/8" Ratchet	3/8" Ratchet	1/2" Ratchet
Capacity:	25-250 ft-lbs 3.61-29.03 N·m	10-75 ft-lbs 16.9-105.1 N·m	20-150 ft-lbs 33.9-210.1 N·m
Increments:	1 ft-lbs .11 N·m	5 ft-lbs .7 N·m	1 ft-lbs .14 N·m
Dimensions:	13"x1.4"x1.5"	17.2"x1.4"x1.5"	20.4"x1.4"x1.6"
Weight, lb/oz(gm):	1/10 (730)	1/15 (870)	2/5 (1060)
Lever Length:	- Varies with different torque settings		

FULL 90-DAY WARRANTY ON CRAFTSMAN MICROTORK® MICRO ADJUSTING TORQUE WRENCH

If within 90 days from the date of purchase, this Craftsman Microtork® torque wrench fails, due to a defect in material or workmanship, Sears will repair and/or recalibrate it free of charge.

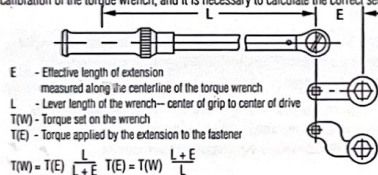
LIMITED WARRANTY

After 90 days and until one year from the date of purchase, Sears will repair any defect in material or workmanship in the torque wrench free of charge. This warranty coverage does not include recalibration. Warranty service is available by simply returning the torque wrench to the nearest Sears store throughout the United States. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

*Center of drive to center of handle
ACCURACY: ±4% on clockwise or right-hand readings greater or equal to 20% of capacity. Complies with American National Standard B107.14M and International Standard ISO 6789

EXTENSIONS

At times, it is impossible or impractical to use regular sockets, (a good example being the tightening of threaded tubing connectors), and a special attachment must be utilized. Such attachments change the calibration of the torque wrench, and it is necessary to calculate the correct settings using the following formulas.



NOTE: Regular socket extensions which extend directly under the drive head along the axis of rotation of the ratchet do not affect the calibration of the torque wrench.

CARE AND MAINTENANCE

1. The CRAFTSMAN MICROTORK® Torque Wrench is a precision instrument and should be handled and stored with care. *It should never be used as a hammer or prybar.*
2. DO NOT apply more torque than the rated capacity of the torque wrench. DO NOT use it as a nut-breaker!
3. When the wrench is not in use, keep it set below 25% of capacity. If you leave the wrench set at a reading over 50% of the wrench capacity for more than a few hours, set the wrench at the lowest setting and leave it for a few minutes before using it again.
4. The wrench is lubricated for life with a special lubricant. Do not oil it in any manner except that the ratchet head may be lubricated as needed for smooth operation.
5. The plastic grip is not affected by petroleum products, but it will be damaged by Acetone and certain industrial solvents. It may be cleaned with a clean cloth wetted in mineral spirits or denatured alcohol. *Never immerse the wrench or any portion of it in any liquid.*

6. Periodically, the wrench should be checked for accuracy. This should be done if the wrench is used frequently or is subjected to abnormal handling or storage. In assembly line type of usage, the wrench should be checked every 5,000 torque applications. Calibration service is available by returning it to your Sears store.
7. With the exception of the ratchet mechanism, the wrench is not user serviceable. *Return it to the nearest Sears store for service.*
8. The ratchet head may be repaired by ordering repair kits #44525 for 3/8" drive and #43445 for 1/2" drive models from Sears, Dept. 98, Source 449.

CRAFTSMAN®

Microtork® Torque Wrench

Owner's Manual Model No's: 44593, 44594, 44595



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All other torque values must be converted to these units first: *Foot Pounds can also be obtained by dividing Inch Pounds by 12

GENERAL CONVERSION TABLE FOR TORQUE UNITS

To \ From	Multiple Number Of	Inch Ounces	Inch Pounds	Foot Pounds	Centimeter Kilograms	Meter Kilograms	Newton Meters
Inch Ounces	1	16	192	13.89	1.389	141.6	
Inch Pounds	.0625	1	12	.8680	.8680	8.851	
Foot Pounds	.005208	.06332	1	.07233	.7233	7.376	
Centimeter Kilograms	.07201	1.152	13.83	1	100	10.20	
Meter Kilogram	.0007201	.01152	1.383	.01	1	1020	
Newton-Meters	.007061	.1130	1.356	.09806	9.806	1	

¹ or divide by 16 ² or divide by 12

TO APPLY TORQUE

1. Attach the proper socket or other attachment to the drive. Set the reversing lever for the proper direction of the operation.

NOTE: If special attachments are used, torque setting must be corrected in accordance with the directions given below in the Extensions section.

2. Place the socket or attachment onto the fastener to be torqued.

3. Utilizing the ratcheting head, you may "spin-down" the fastener until resistance is felt.

4. Holding the wrench by THE GRIP ONLY, apply SLOW AND STEADY pull until a momentary release impulse is felt. Release tightening pressure immediately when the release is felt.

WARNING: At low torque settings the release is gentle and there usually is no audible 'click' signal. Learn how the release feels BEFORE you torque to avoid accidental over-tightening or damage.

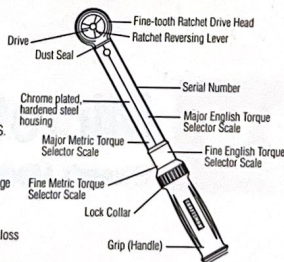
*When using long sockets or extensions, the wrench may be supported at the head (only at the head) with only negligible effects on accuracy.

5. The wrench resets automatically and is ready for the next operation.

SAFETY RULES

STUDY THIS BOOKLET CAREFULLY BEFORE ATTEMPTING TO OPERATE THIS WRENCH.

- Never apply more torque than the maximum scale reading.
- This torque wrench is designed for manual tightening of threaded fasteners only. DO NOT USE IT AS A NUT-BREAKER OR FOR ANY OTHER PURPOSE.
- Overtorqued or defective fasteners and sockets may suddenly break. Ratchets that are improperly engaged, worn out, damaged, or overtorqued may slip or break. TO PREVENT INJURY, KEEP PROPER FOOTING AND BALANCE AT ALL TIMES. DO NOT USE THE WRENCH IN PLACES FROM WHICH YOU MAY FALL OR SLIP, OR AROUND OPERATING MACHINERY.
- This wrench will not prevent you from applying more torque than set - it is not a torque limiting tool. At low settings the release is gentle and there usually is no audible 'click' signal. Learn how different amounts of torque 'feel', so you will reduce the possibility of damage and/or injury due to accidental overtorquing.
- APPLY FORCE TO THE GRIP ONLY. DO NOT USE 'CHEATER BARS' (a piece of pipe placed over the hand grip).
- There are no user-serviceable components inside the wrench. Disassembling the wrench or making any adjustments will result in the loss of accuracy, and will void the warranty.



OPERATING INSTRUCTIONS TO SET TORQUE

- Unlock the grip by turning the lock collar in the unlock direction.
- Rotate the grip until the desired torque is indicated on the micrometer scale. See examples of readings below.
- Lock the grip by turning the lock collar in the lock direction.



WARNING: Use only hand pressure - pliers, wrenches, or other tools may over tighten and damage the lock collar.

*Various models and capacities of wrenches are illustrated. Though they might be different, from your particular wrench, the principle of obtaining the scale reading is the same.

**By necessity, metric scales are not calibrated in even numbers. Consequently, when using Metric scales, set the wrench at a reading closest to the desired torque.

WARNING: 1. Do not attempt to turn the grip while it is locked. 2. Do not turn the grip either below the lowest scale reading or above the highest scale reading.

