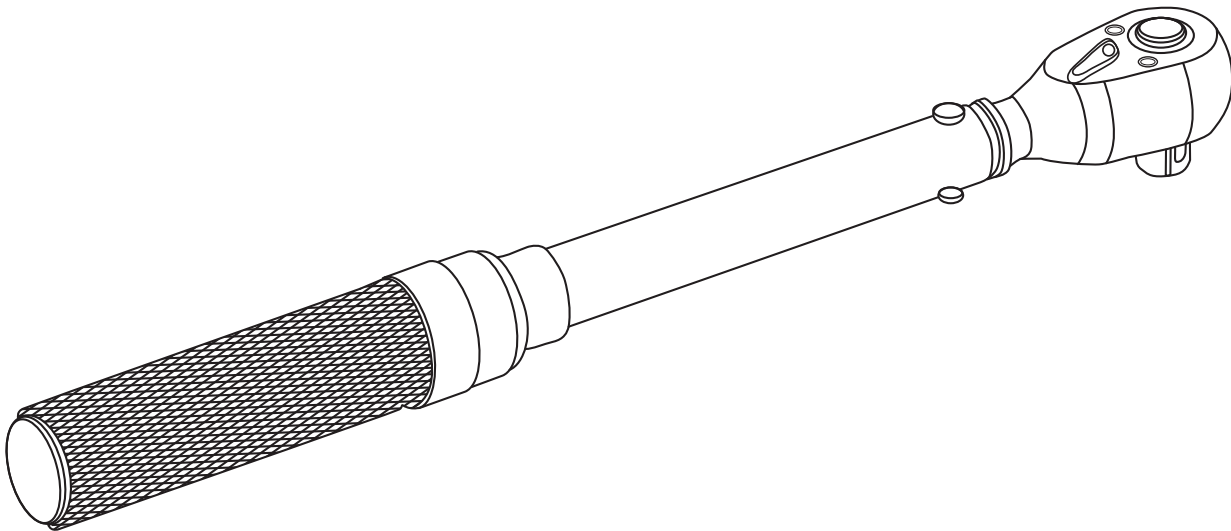




1/2 MICROMETER TORQUE WRENCH

OPERATIONS MANUAL

Torque Range – 25 – 250 ft/lbs (33.9 – 330 Nm)



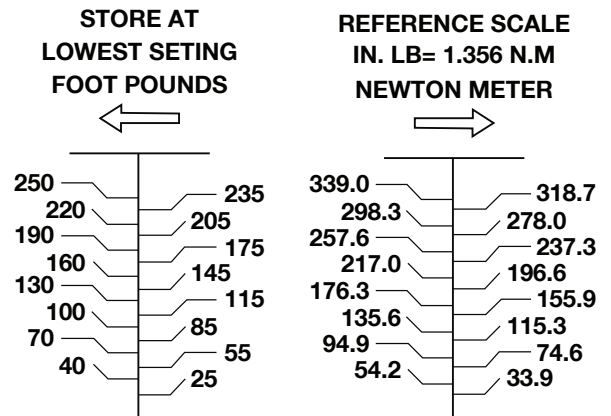
WARNINGS

- Make sure to read and understand these instructions carefully, 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.
- This wrench is shipped ready to use, calibrated and tested to an accuracy of +/- 3%. To maintain this accuracy, it is important that your wrench is stored at the lowest torque setting, **25 ft/lbs (33.9 Nm)**. This setting relieves extra tension on the internal spring, eliminating fatigue to critical components.
- Do not exceed adjusted torque setting while operating wrench. Release when click sounds.
- Do not use wrench to break free stuck fasteners or to loosen fasteners.

MAINTENANCE AND STORAGE

1. If wrench has not been used for a long period of time, set the wrench to a low torque setting and operate it several times. This will allow the internal lubricants to lubricate moving parts.
2. When wrench is not in use, make sure to set torque adjustment at the lowest setting, **25 ft/lbs (33.9 Nm)** (Fig. A). Do not turn handle below lowest torque setting or damage may occur.
3. This wrench is a precision measuring instrument. Take care to operate your 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.
5. It is recommended that you recalibrate your torque wrench every 12 months or if dropped. This will ensure proper accuracy and operation.

Fig. A



SETTING SPECIFIED TORQUE

This is a dual-range torque wrench marked with foot pounds (–ft/lbs) and Newton meters (Nm) on opposite sides of wrench. The torque scale is marked on the handle body, and precise subdivisions on the knurled handle (Fig. B). In these instructions the handle body scale will be referred to as the “main graduation scale” and the knurled handle scale will be referred to as the “micrometer sub graduation scale”.

Fig. B

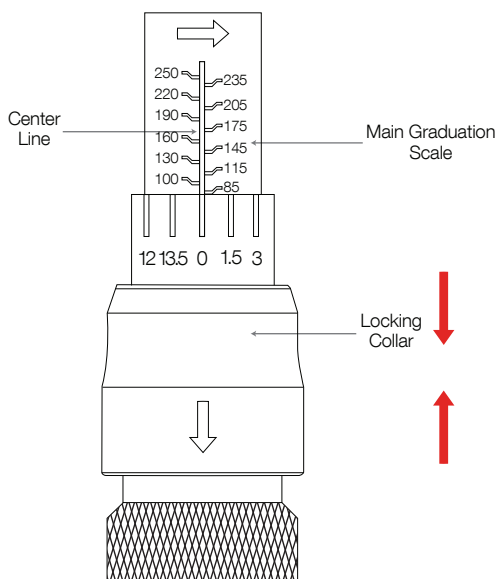


Fig. C

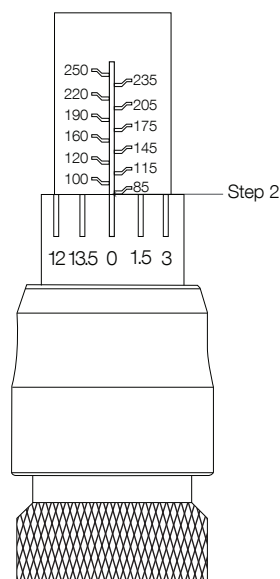


Fig. D

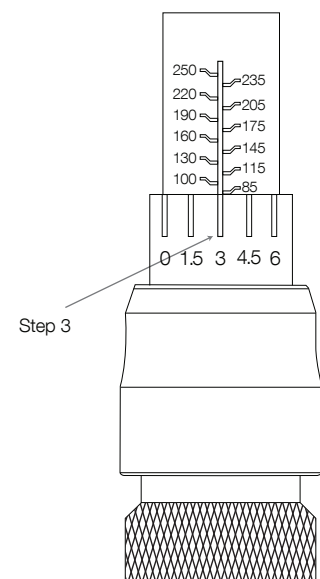


Fig. E - Micrometer Marking Scale Example:

Mark	0	1	2	3	4	5	6	7	8	9
Value	85	86.5	88	89.5	91	92.5	94	95.5	97	98.5
increment	0	1.5	3	4.5	6	7.5	9	10.5	12	13.5

(Example: Setting to 88 ft/lbs)

1. Locate locking collar above the knurled handle. Unlock knurled handle by pulling down on the locking collar and holding down while turning handle to desired torque setting. Release locking collar to engage. (Fig. B)
2. **MAIN SCALE ADJUSTMENT** (Fig. C) Using ft/lbs scale, turn knurled handle until its top edge is level with the horizontal "85" mark on main scale and the "0" mark on micrometer fine scale is centered on vertical line of main scale.
3. **FINE SCALE ADJUSTMENT** (Fig. D) The micrometer scale divides the main scale markings into **10 divisions**. Every micrometer scale marking equals **1.5 ft/lb.**, To increase torque from 85 to 88, turn knurled micrometer handle clockwise until (Mark "2" = 3 ft/lbs) is centered on vertical line of main scale. 85 ft/lbs (main scale) + 3 ft/lbs (micrometer scale) = 88 ft/lbs. (Reference Fig. E)
4. Lock torque setting by releasing the locking collar and engaging the handle. Check that the Micrometer handle is engaged by trying to turn handle with locking collar released. If handle does not turn than the wrench is now set to measure 88 ft/lbs of torque and ready for use.

* For setting desired torque on Newton Meters (Nm) scale, the Nm scale uses the same procedure described above for ft/lbs scale. The micrometer scale divides the main scale markings into 10 divisions. Every micrometer scale marking equals **2.03Nm**, also known as the minimum increment. **NOTE:** Marked Value Increments are in In/lbs.

WRENCH OPERATION

For accurate operation, grasp the knurled handle only and apply force. When the desired torque setting is reached, you will hear and feel a click. This signifies that you have reached the desired torque. Continuing to press on the wrench after click sounds will cause over torquing and can lead to undesired effects. **WARNING:** At low torque settings, the click sound can be very subtle. Pay close attention while operating.

1. After setting desired torque. Install proper socket to the square drive. Place socket on the nut/bolt to be tightened.
2. Operate torque wrench the same way as a standard ratchet when tightening a nut/bolt. As nut/bolt becomes tightened, slow force of operation, press smoothly. **WARNING:** Operating the wrench too quickly and with too much force can cause you to miss the exact torque setting.
3. At the moment the wrench clicks, the torque setting has been reached. Stop applying force to the wrench immediately and release pressure. Do not continue to press once torque setting is reached. Doing so will overtighten the nut/bolt and could cause damage. Once pressure is released from the handle, the wrench will automatically reset and is ready for next use.

1/2 MICROMETER TORQUE WRENCH

WARRANTY

You are backed by the ARES Tool Performance Assurance!

ARES TOOL warrants this product (excluding carrying cases and storage accessories and the product categories set forth below) to the original purchaser for its useful life (not to exceed one year for products with electrical or electronic components) against defects and deficiencies in material and workmanship.

This **LIMITED LIFETIME WARRANTY** does not cover products which in ARES Tool's judgement have been subject to negligence, misuse, abuse, accident, improper storage, alteration, improper repair, disassembly and/or reassembly. Normal wear and tear are also excluded. Deficient products will be replaced or repaired.

Please call or email at (206) 453-6776 / ares@arestool.com for more details or to receive support.

This warranty excludes blades, bits, bit sockets, carrying cases, pouches, torque products, punches, dies, bulbs, fuses, batteries, and other consumables which must be replaced under normal use and service. These warranties set forth herein are the sole warranties applicable to Products and is in lieu of all other warranties, whether expressed, implied or statutory.

The implied warranties of merchantability and fitness for a particular purpose are specifically excluded. Customer's sole and exclusive remedy for breach of this Warranty is, at the option of **ARES TOOL**, repair or replacement of the defective product.

Please visit us at WWW.ARESTOOL.COM to register your product and sign up for our ARES Tool Club

F10 MADE IN CHINA
HECHO EN CHINA
FABRIQUÉ À CHINA



WARNING:
Cancer and Reproductive Harm-
www.p65Warnings.ca.gov



ALWAYS WEAR EYE
PROTECTION THAT COMPLIES
WITH ANSI STANDARD



PLEASE RECYCLE



POR FAVOR RECICLE
VEUILLEZ RECYCLER