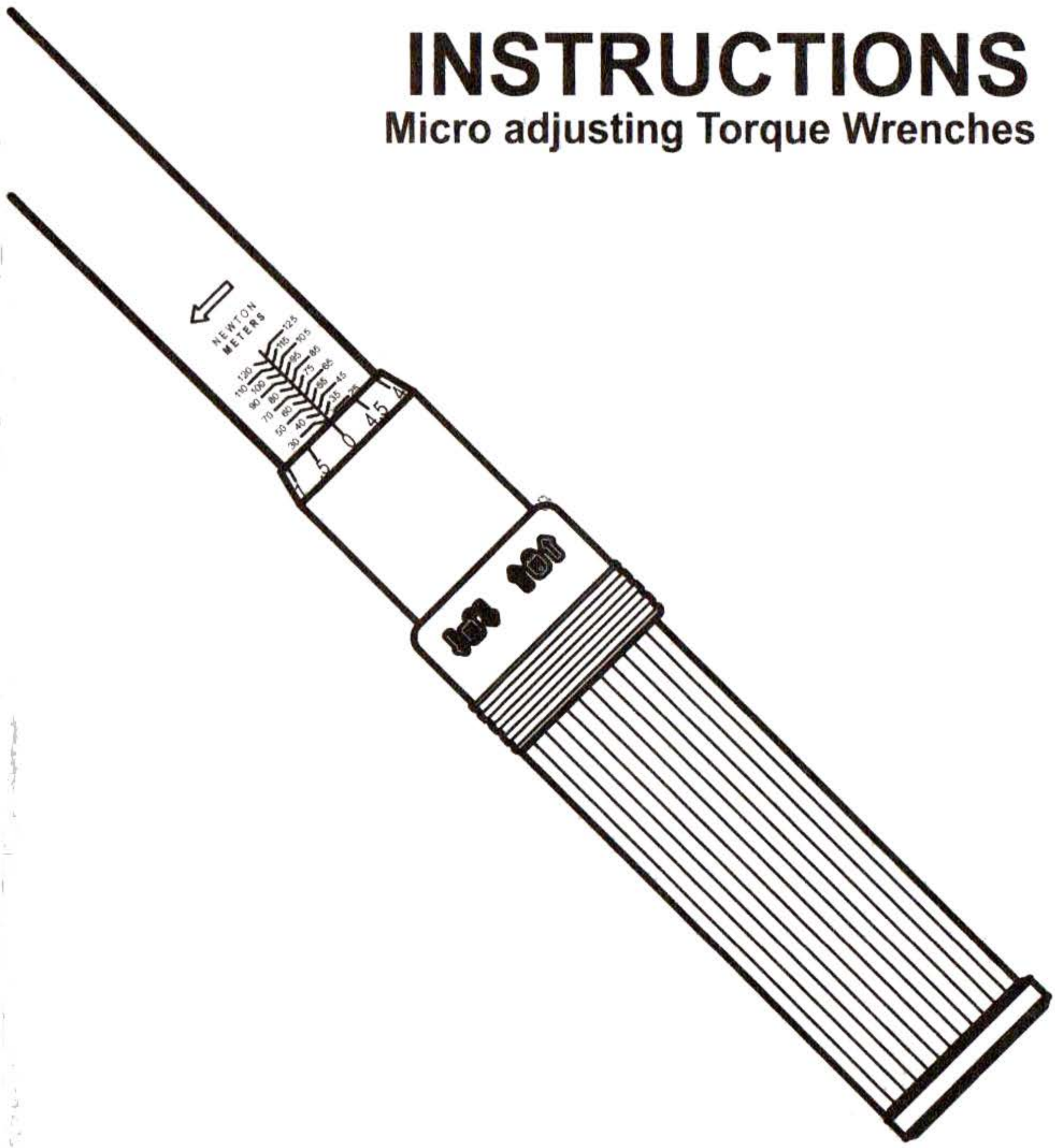
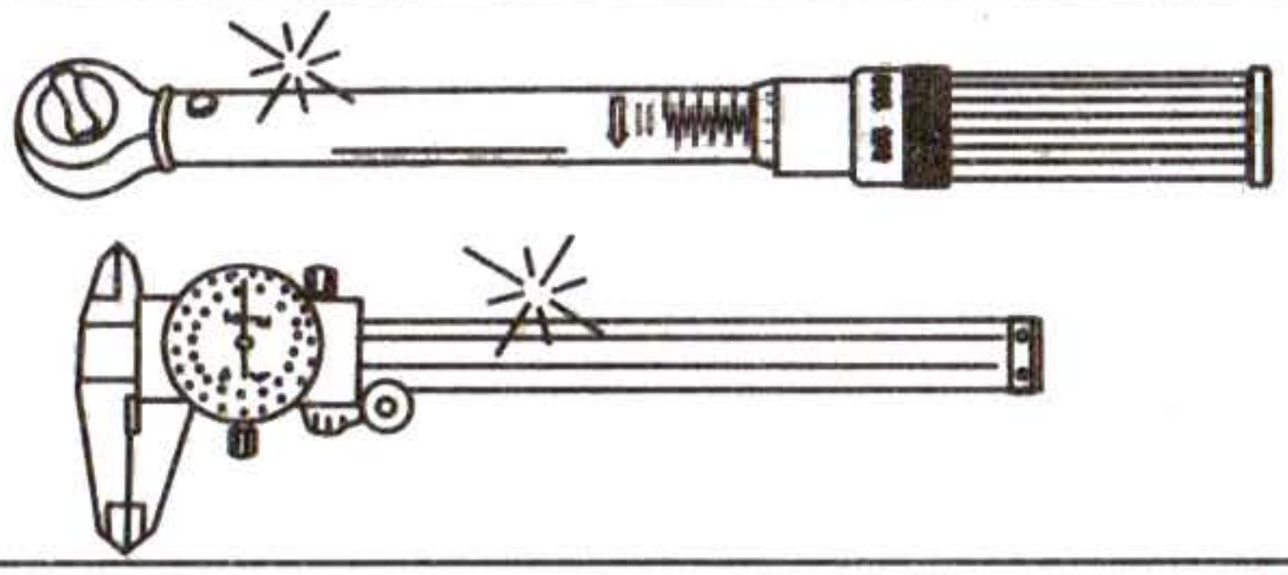
INSTRUCTIONS

Micro adjusting Torque Wrenches



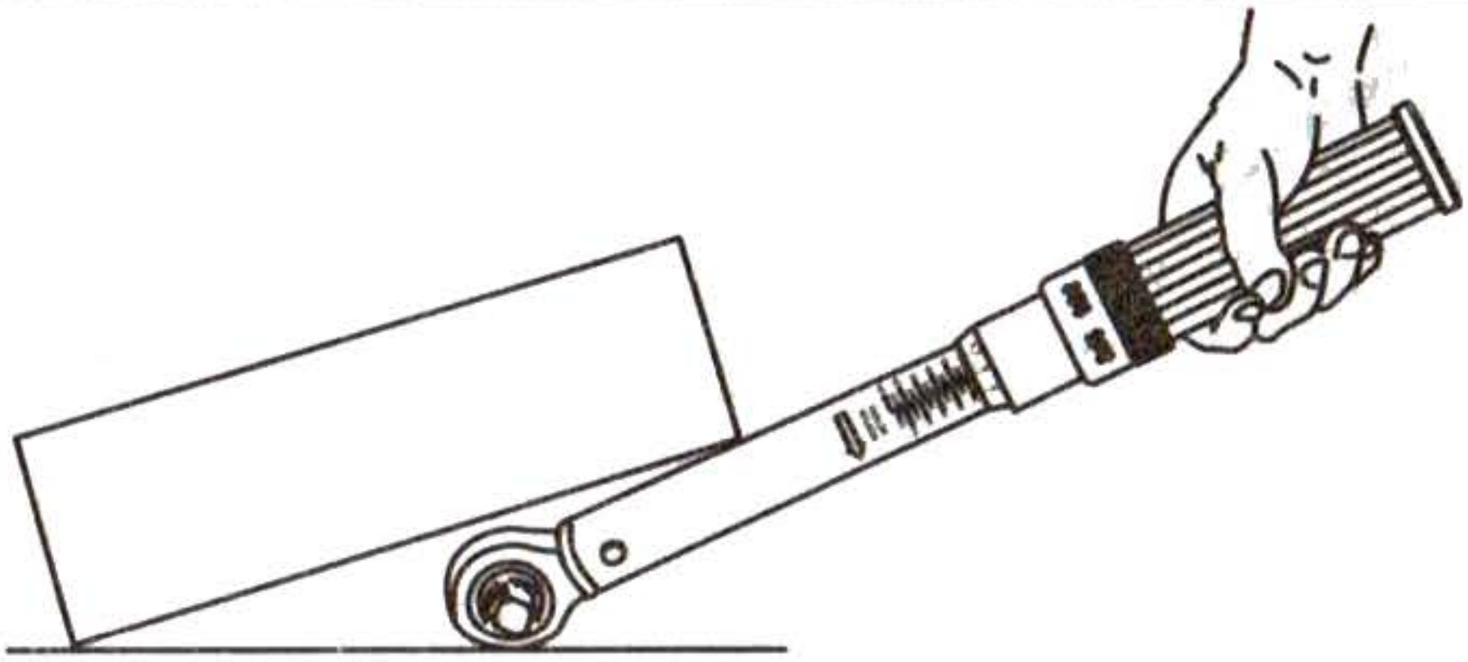
READ BEFORE YOU USE

1



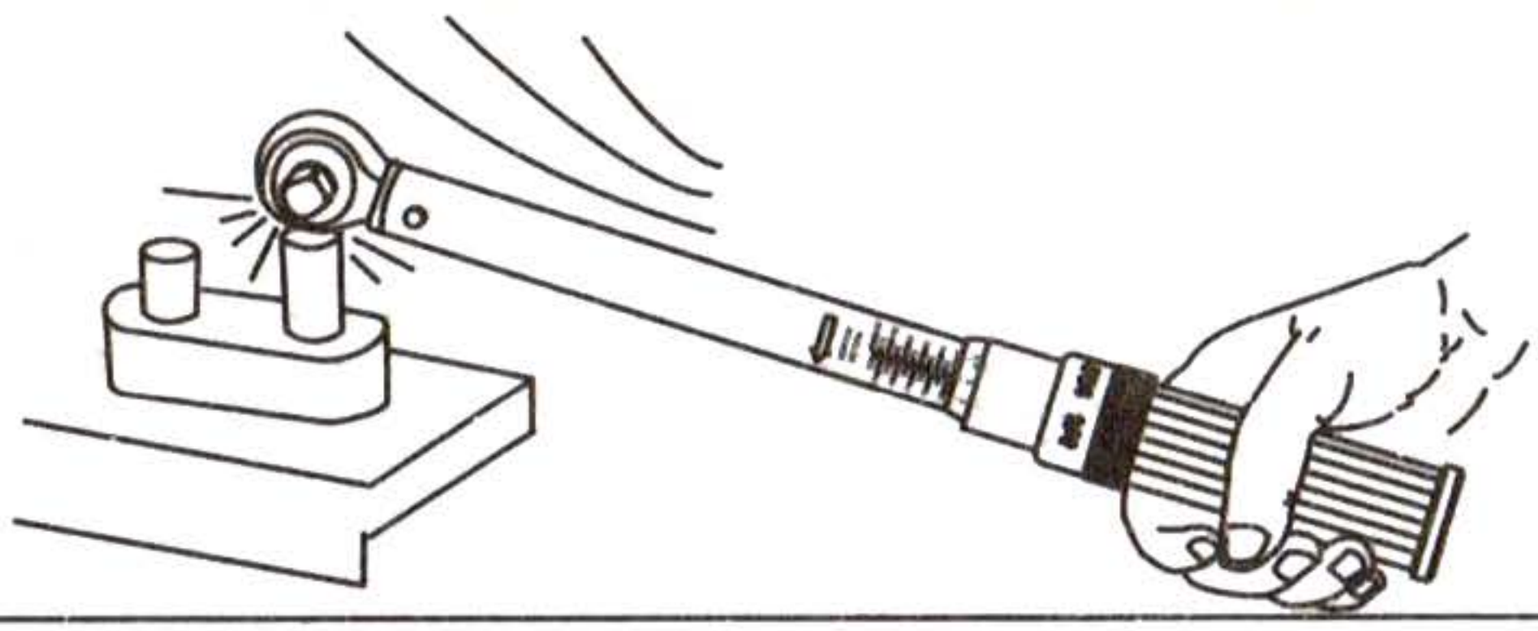
✓

2



X

3



X

1.This torque wrench is a precision instrument intended to be used only to tighten screws, bolts and nuts to a desired torque.
2. Do not use it as a "nut breaker", pry bar, hammer, or in lieu of a regular ratchet wrench.
3.Do not apply torque in excess of the maximum capacity of the wrench. Apply load on the grip only, and do not use any handle extension bars (a piece of pipe put over the grip).
4.Head Holder torque wrench should be used with heads.If using special heads,please set torque as formula on page 7.

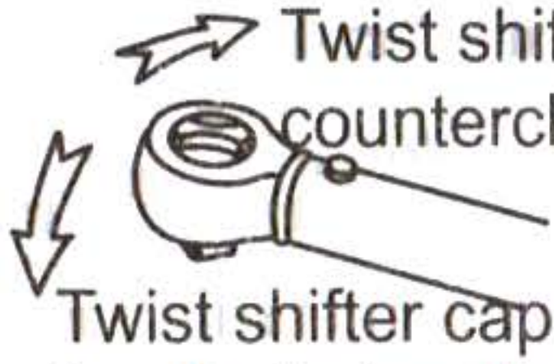
5. Make sure that you adjust the wrench to the exact torque units your specifications call for, or you will severely under-torque or over-torque, causing severe damage to the equipment you are working on.
6. Do not disassemble the wrench for any reason. Highly stressed internal components may cause severe injury when released in an unintended manner.
7. The wrench should be re-calibrated periodically. The calibration of the wrench should be checked at least once a year, after any abnormal handling or overloading, or after 5,000 cycles ("clicks").

Head types

1. Fixed Ratchet head



45-tooth reversible ratchet:wrench operates in both clockwise and counterclockwise direction. However, unless stated otherwise, the wre ch is calibrated in clockwise direction only.

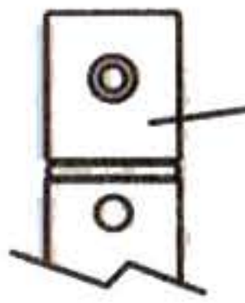


2. Flex Rachet head

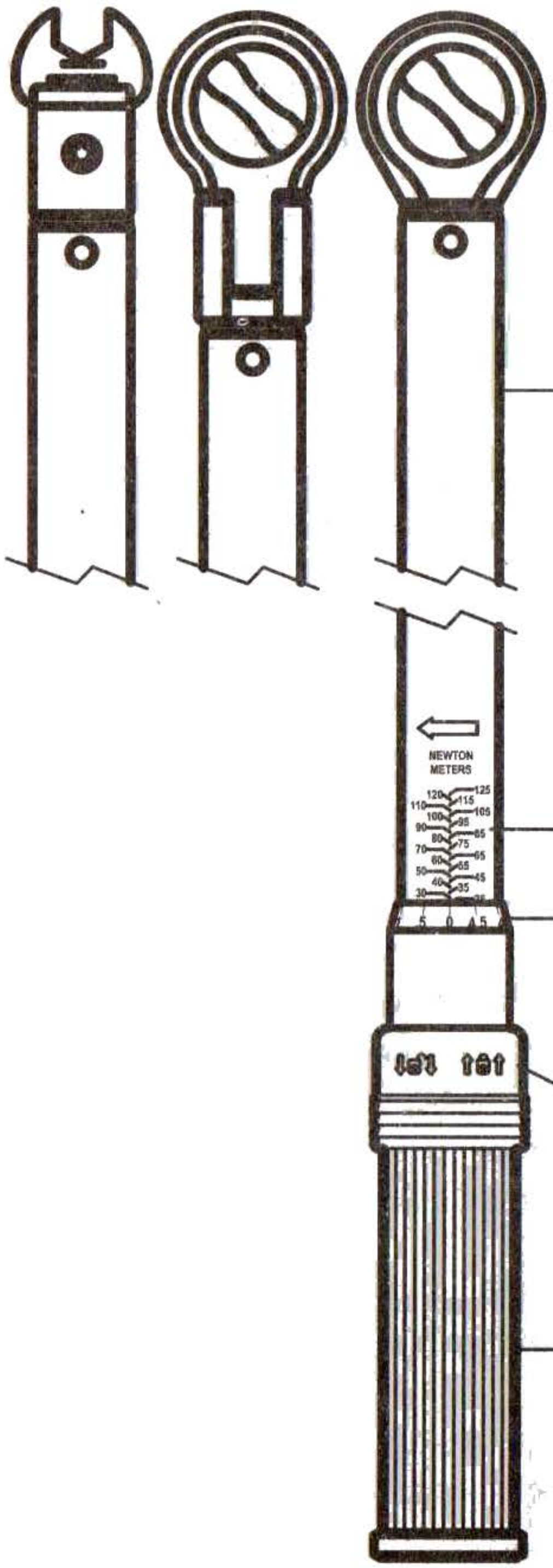


Operates the same as the Fixed Ratchet, but can be turned ±15° up or down.

3. Head holder



Holds different size Ratchet Heads, Open End, Box End or Open Box End heads.



Torque wrench indicates when the preset torque has been reached by releasing for a few degree of free travel, which is usually accompanied by an audible "click" signal.

Hardened alloy steel housing

EASY TO READ SCALES:

Major Torque Scale

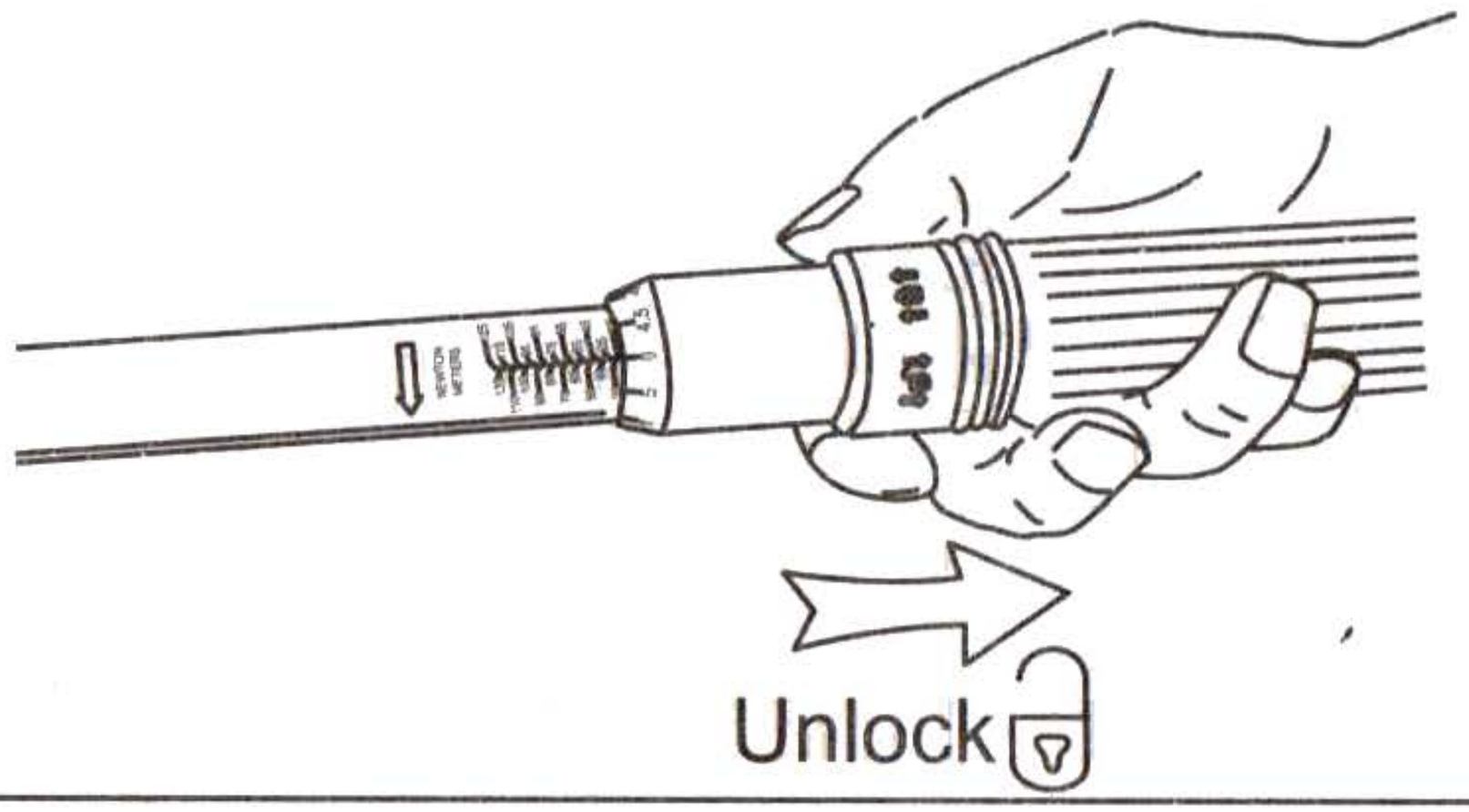
Minor Torque Scale

Pull/push style lock knob secures selected torque from accidental change,easy to lock and unlock

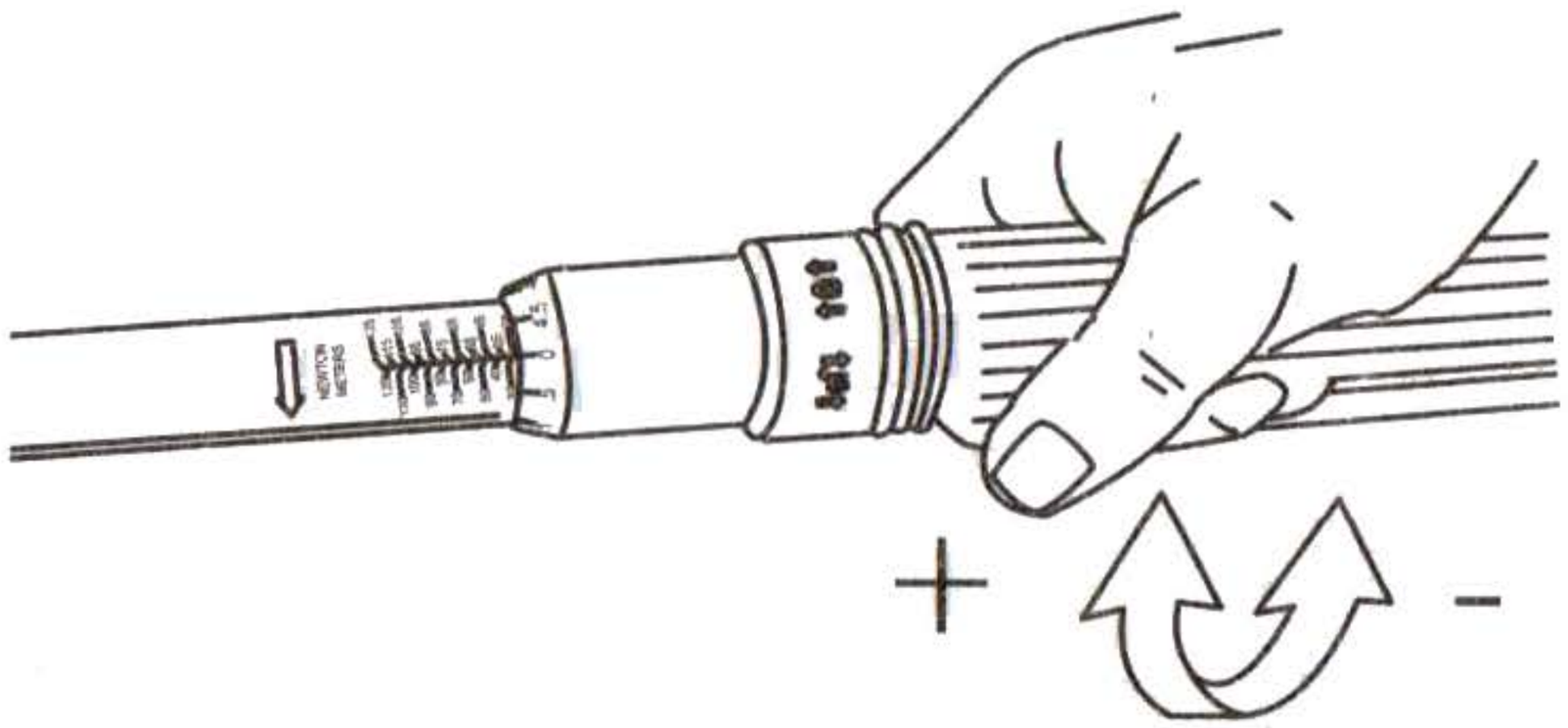
All-metal durable knurled grip

SETTING TORQUE

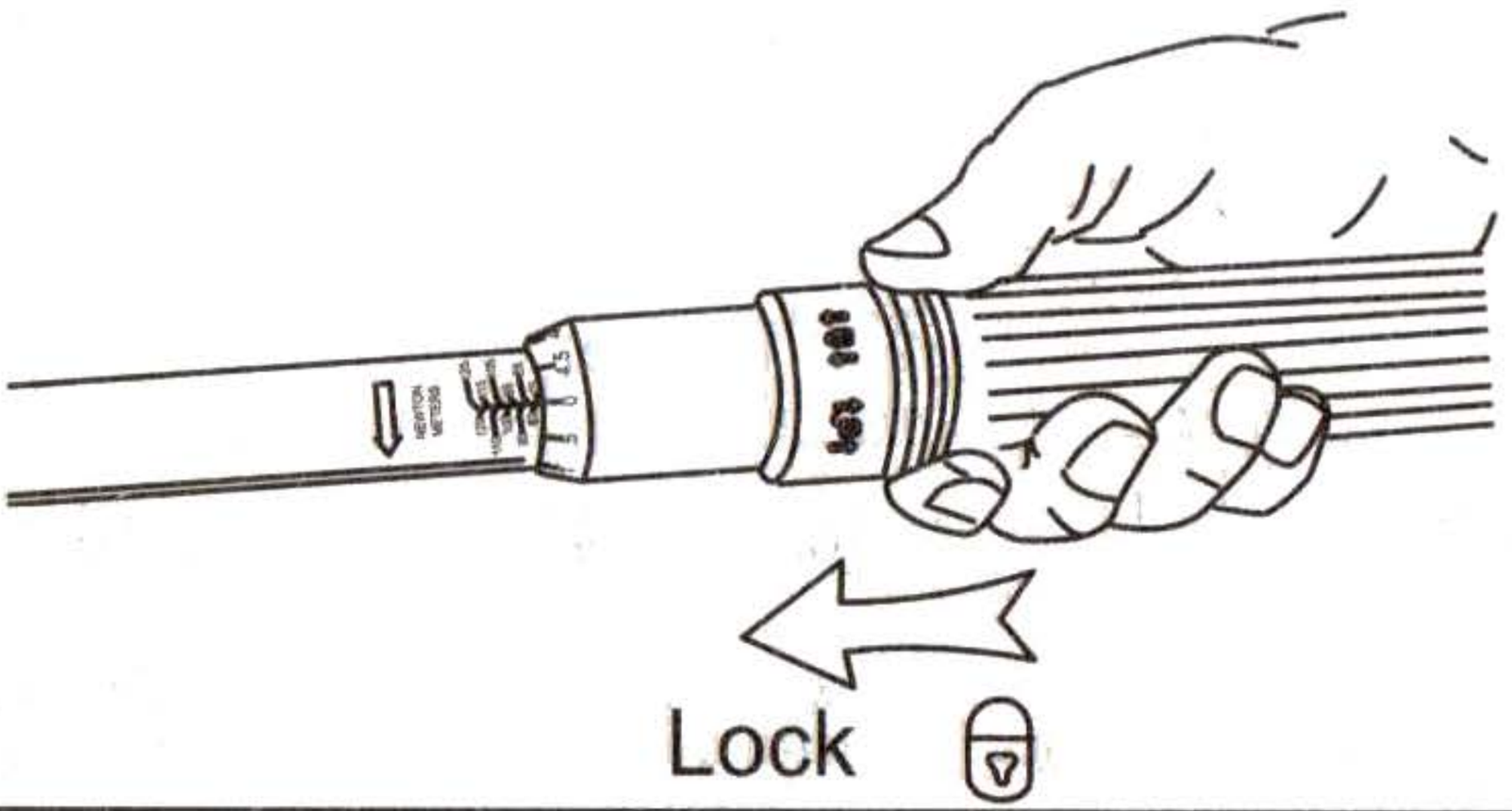
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2



3

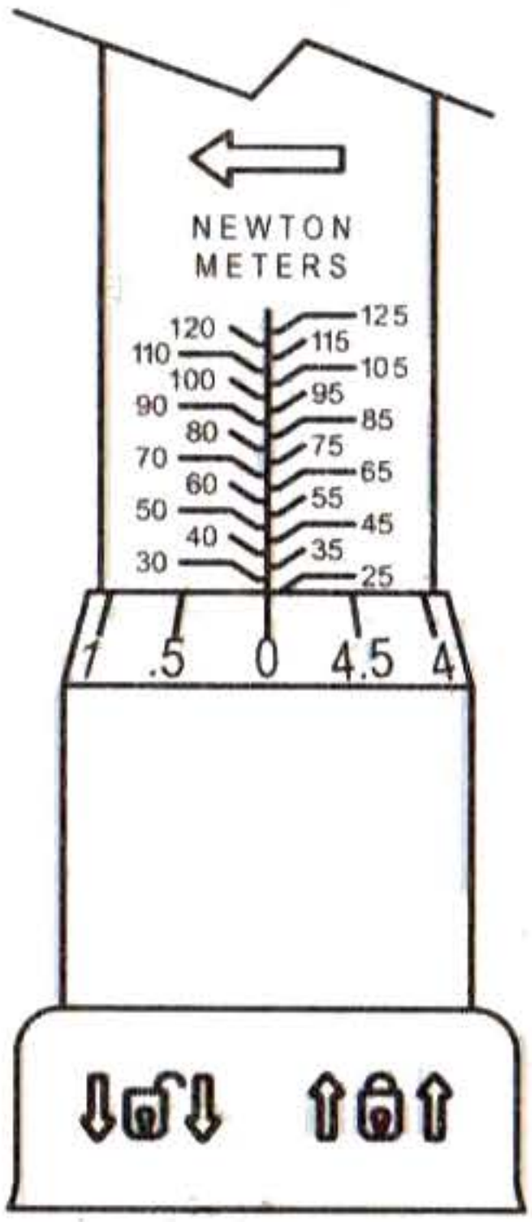


SETTING TORQUE

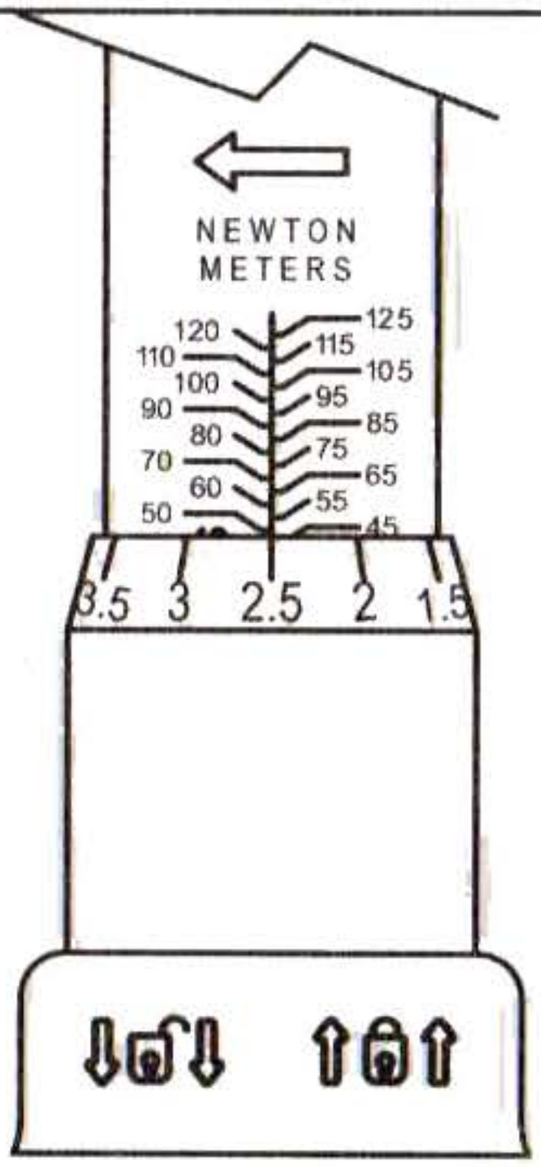
1. Pull the lock knob out downside. The locking and unlocking directions are indicated by appropriate icons on the lock knob.
2. Turn the grip in the clockwise direction to increase the torque, and in the counterclockwise to decrease it.
3. The major scales show the amount of torque in both primary and secondary units. The minor scale shows fine increments in primary units. See examples on the next page.
4. Push the lock knob back to lock the grip. The minor scale may move a small amount to either side of the centerline mark without affecting the accuracy of your setting.

EXAMPLES OF SETTING

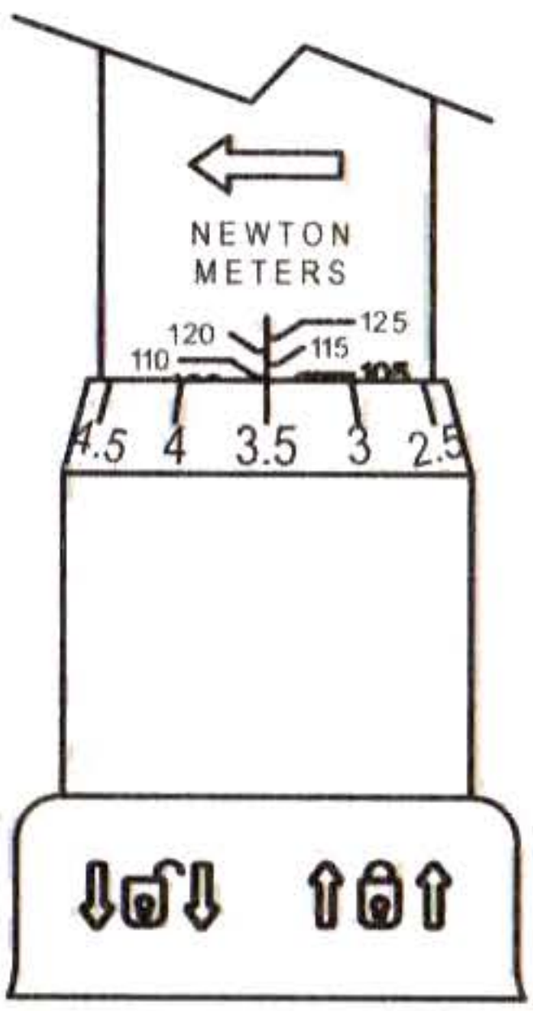
125 N.m wrench



25.0 N.m
(18.4 Lb.ft)



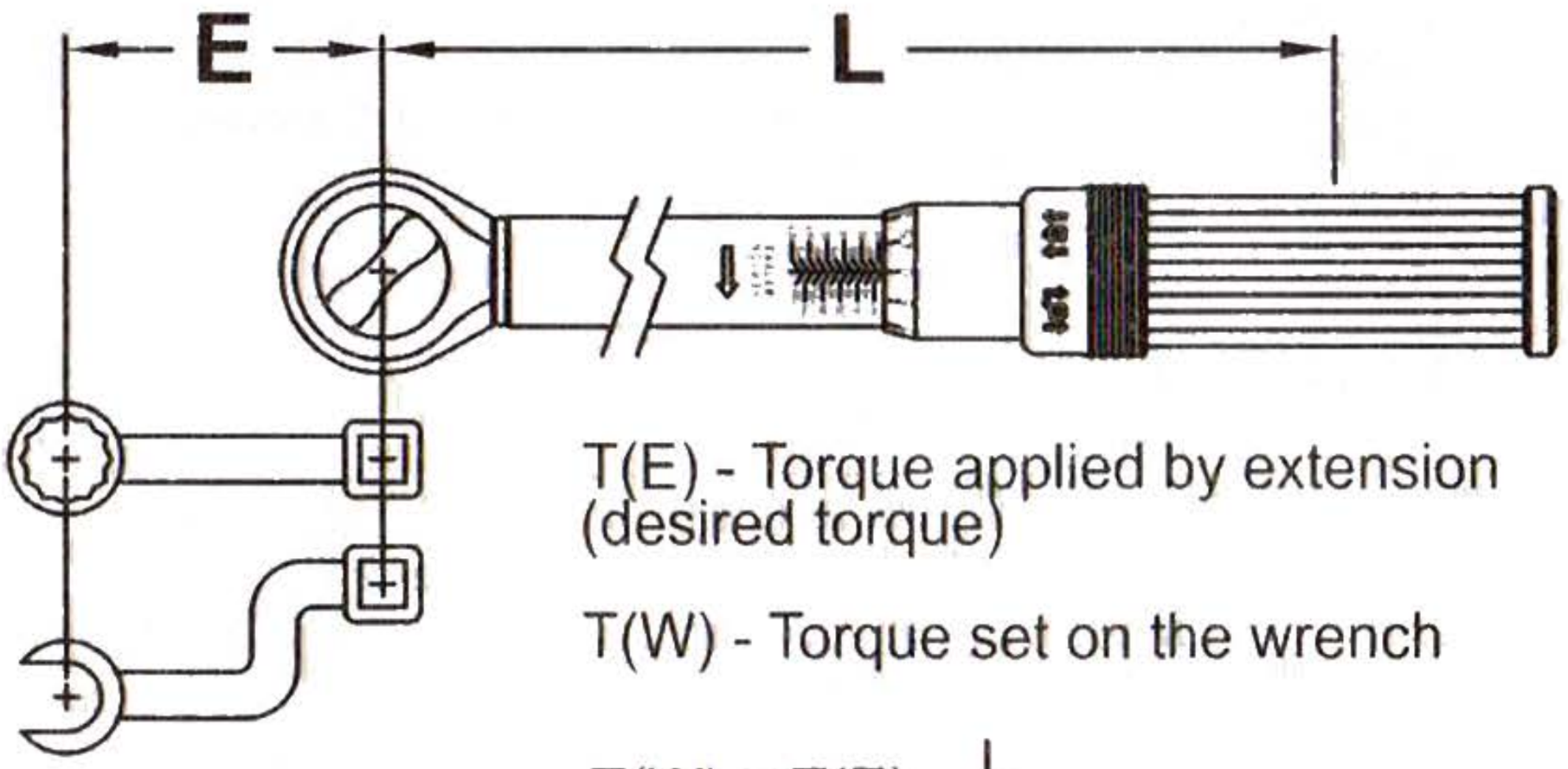
47.5 N.m
(35.0 Lb.ft)



108.5 N.m
(80.0 Lb.ft)

USE OF EXTENSIONS

Attachments and non-standard heads will cause the applied torque to be different from the set torque.Consequently when using them,the set torque must be adjustd in accordance with the formula shown on below.



T(E) - Torque applied by extension (desired torque)

T(W) - Torque set on the wrench

$$T(W) = T(E)\,\frac{L}{L+E}$$

APPLYING TORQUE

1. Insert an appropriate socket or drive attachment onto the square drive of the ratchet and onto the fastener you want to tighten.
2. Apply hand pressure to the grip, and ONLY TO THE GRIP. You may support the wrench at the ratchet head with the other hand to steady it, especially when using long socket extensions, without appreciably affecting the accuracy of the wrench.
3. If, due to the required effort, you need to use both hands, put the other hand on the top of the first hand, never on any other part of the wrench.
4. Apply slow and steady pull or push until the wrench momentarily releases, with or without a distinct "click" sound. Release the pressure right at this point. DO NOT OVERTORQUE!

SAFETY WARNING

Overtorqued or defective fasteners, sockets, as well as the wrench itself, may suddenly break causing you to lose balance, fall, or to suffer other trauma. Be sure that you have firm footing, are properly balanced, and if necessary are using appropriate harness, back support, or other safety device.

MAINTANANCE

1. When not in use, adjust the wrench to its lowest reading , and store it in the provided case.
2. With the exception of the ratchet mechanism, do not lubricate the wrench. The ratchet mechanism may be lubricated as needed with a few drops of light machine oil.
3. Do not use acetone or other solvents to clean the wrench, use window cleaner or denatured alcohol applied with a clean cloth instead.
4. With the exception of the ratchet mechanism, there are no user-serviceable parts. Do not disassemble the torque wrench for any reason. When service is needed, send the wrench to the nearest factory-authorized service center.

CERTIFICATION

This torque wrench is certified to have been calibrated prior to shipment to the accuracy of +/- 4% in the clockwise direction .