# 96218 - 1-WAY MICROMETER ADJUSTABLE TORQUE WRENCH - INSTRUCTION MANUAL (STEELMAN)



**WARNING** - Read and understand all instructions before operating torque wrench. Be sure to save these instructions.



## **CALIBRATION:**

- · An out of calibration torque wrench can cause part or tool breakage.
- · Periodic re-calibration is necessary to maintain accuracy.
- DO NOT exceed rated torque as over torquing can cause wrench or part failure.
- · DO NOT use wrench to break fasteners loose.



**WARNING** - Do not use cheater extension on the handle to apply torque. Broken or slipping tools can cause injury.



#### **MAINTENANCE AND SERVICE:**

- The torque wrench's internal mechanism is permanently lubricated during assembly.
- DO NOT attempt to lubricate the wrench's internal mechanism.
- DO NOT immerse wrench when cleaning.
- · Clean tool by wiping.
- Store torque wrench in protective case at its lowest torque setting.
- · DO NOT force handle below its lowest setting.
- Comply with all applicable safety regulations.

### **ONE YEAR LIMITED WARRANTY**

STEELMAN® 1-Way Adjustable Micrometer Torque Wrench is backed by a One Year Limited Warranty. This warranty covers manufacturer defects and workmanship. This warranty excludes misuse or abuse, and normal wear and tear, Exclusion is not allowed in some states and may not apply. This warranty gives you specific legal rights, and you may have other rights, which vary from state to state.

Torque wrenches will last longer if reasonable care is taken. Always unwind handle to the lowest torque setting and store properly after each use. Only a qualified technician should repair and lubricate the internal torque mechanism. Clean torque wrench by wiping with a clean towel, do not immerse in fluids. Torque wrench should be sent to a qualified calibration lab once a year or every 5000 cycles for re-calibration (whichever comes first).

#### STEELMAN.

JS Products • 6445 Montessouri Street • Las Vegas, NV 89113 800.255.7011 • Fax: 775.898.8773 • www.steelmantools.com

Version: 02/08

NOTE:

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Made in Taiwan



OPERATING INFORMATION WARNING INFORMATION

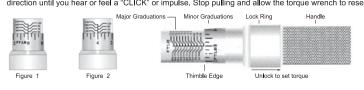


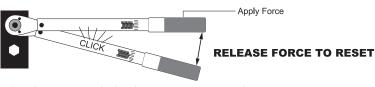
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**WARNING** - Ratchet mechanism may slip or break if dirty, mismatched or if worn parts are used. Ratchets that slip or break can cause injury.

#### **OPERATING INSTRUCTIONS:**

- A. To unlock handle, hold the body tube and pull the lock ring back, allowing the handle to turn clockwise or counter-clockwise.
- B. Set the torque wrench to the desired torque setting as follows: **EXAMPLE 64 ft-lb** 
  - Keep slight rearward pull on lock ring during ALL adjustments.
    Line up the thimble edge with the "60" (sixty) graduation cross line, and the "0" (zero) with the vertical line. The torque wrench is now set at 60 ft-lb (See Figure 1).
    Turn the handle and set the thimble graduation to "4" (four) on the vertical line. The torque wrench is now set
  - at 64 ft-lb (See Figure 2). 4. Lock the handle by releasing the back pressure on lock ring until you hear or feel the torque wrench "CLICK"
  - and the handle doesn't turn. To torque fastener, keep your hand centered on the grip handle, apply a slow steady force in the desired direction until you hear or feel a "CLICK" or impulse. Stop pulling and allow the torque wrench to reset.

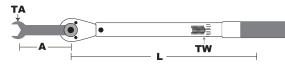




# **USE OF EXTENSIONS AND ADAPTERS:**

When using an extension or adapter (increasing the effective length of the torque wrench), the output torque value will change. To calculate the new torque output of the torque wrench, use the following:

TW = TA x L (TA=Torque exerted at the end of adapter, L=Distance between square drive and hand position) **L + A** (TW=Torque wrench scale reading, A = Length of adapter or extension)



A number of variables including the length of the adapter or extension, length of the torque wrench, and variations in hand position on the torque wrench, will affect the accuracy of the above calculation. 3

#### **CONVERSION TABLE**

FROM UNIT	TO UNIT	MULTIPLY BY	FROM UNIT	TO UNIT	MULTIPLY BY
in-oz	in-lb	0.0625	dNm	Nm	0.1000
in-lb	in-oz	16.000	Nm	dNm	10.000
in-lb	ft-lb	0.0834	Nm	cmkg	10.200
in-lb	cmkg	1.1519	Nm	mkg	0.1020
in-lb	mkg	0.0116	Nm	in-lb	8.8500
in-lb	Nm	0.1130	Nm	ft-Ib	0.7376
in-lb	dNm	1.1300	cmkg	in-lb	0.8681
ft-Ib	in-lb	12.000	cmkg	Nm	0.0981
ft-Ib	mkg	0.1382	mkg	in <b>-l</b> b	86.810
ft- <b>l</b> b	Nm	1.3560	mkg	ft-lb	7.2360
dNm	in-lb	0.8850	mkg	Nm	9.8070

The measured tolerances of these torque wrenches, as calibrated at the factory, are certified to meet the accuracy of the following testing standards: ASME B107.14-2004 and ISO:6789. Additionally, all wrenches are calibrated on a torque standard traceable to the National Institute of Standards and Technology (NIST).



**COLOR SPECIFICATION:** 1-COLOR

**MATERIAL SPECIFICATION:** 80 lb. Gloss Text

SIZE SPECIFICATION: 2.750" H x 6.000" W - Folded Finished Size

