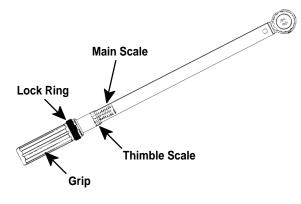
### Features

- Operates and ratchets in both right- and left-hand directions.
- May be used for uncontrolled wrenching as long as torque does not exceed maximum capacity.
- Lock ring prevents accidental change of torque setting.
- All parts corrosion-proofed. Wrench made of highest quality heat-treated steel, and finished with tough, durable chromium-nickel plating.
- Hand grip is impervious to fluids such as gasoline, oil, and kerosene.





**CAUTION:** To prevent personal injury when using these torque wrenches, wear eye protection that meets ANSI Z87.1 and OSHA standards.

### Certification

This torque wrench was calibrated prior to shipment from the factory with tolerance limits of  $\pm 3\%$  clockwise (right-handed) accuracy of upper 80% of range.

**NOTE:** Part No. 7379 has tolerance limits of  $\pm 4\%$  clockwise (right-handed) accuracy, and  $\pm 6\%$  counterclockwise (left-handed) accuracy.

### **Limited Warranty**

Until one year from the date of purchase, we will repair any defect in material or workmanship free of charge. Improper use of these products, including but not limited to the application of excessive force, will affect performance and may result in injury. The warranty does not apply to wrenches which do not function properly or within specified accuracy because of wear, improper or unreasonable use, damage not resulting from defect or malfunction, or which have been altered. Calibration is warranted for 90 days.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

For repair or calibration, send wrench, postage prepaid, to:

Angle Repair Service, Inc. 175 Angle Drive Beckley, West Virginia 25801



# Micrometer Adjustable Torque Wrenches

Part Nos.	7375
	7377
	7378
	7379

**Operating Instructions** 



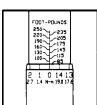
SPX Corporation 655 Eisenhower Drive Owatonna, MN 55060-0995 USA Phone: (507) 455-7000 Tech. Serv.: (800) 533-6127 Fax: (800) 955-8329 Order Entry: (800) 533-6127 Fax: (800) 283-8665 International Sales: (507) 455-7223 Fax: (507) 455-7063

## Adjusting the Torque Wrench

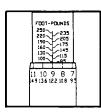
**IMPORTANT:** To prevent damage to the adjusting mechanism, do NOT turn the GRIP with the LOCK RING in the lock position.



1. To unlock the torque wrench, hold the handle grip with one hand, and turn the lock ring clockwise until it stops.



2. Rotate the grip until the "0" on the thimble scale reaches the primary number of the desired torque value on the shaft main scale.



- 3. Continue rotating the grip if the desired torque value is between the primary numbers on the main scale. Add the secondary number on the thimble scale to the primary number on the main scale to achieve the desired torque value. Refer to *Examples of Torque Settings* section.
- 4. To lock the wrench, hold the handle grip with one hand, and turn the lock ring counterclockwise until it stops.

#### NOTE:

- Grasp the GRIP, not the SHAFT.
- Clean thread surfaces and remove burrs from fasteners.
- It is not necessary to return this wrench to its lowest calibrated value after use, unless it will be stored for an extended period of time.

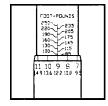
# **Examples of Torque Settings**

The main scale American Standard graduations are on the front of the shaft, and the thimble scale graduations are closest to the beveled edge.

The main scale Metric graduations are on the reverse side of the shaft, and the thimble scale Metric graduations are below the American Standard graduations.

### American Standard

1. For a torque setting of 94 foot pounds, rotate the grip until the "0" on the thimble scale is aligned with the "85" on the "ft. lb." main scale.

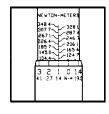


2. Continue rotating the grip clockwise until the "9" on the thimble scale is aligned with the center line on the "ft. lb." main scale. The wrench is now set at 94 ft. lbs. (85 + 9 = 94).

3. Put the lock ring in the lock position before using the wrench.

#### Metric

1. For a torque setting of 105.8 Newton meters, rotate the grip until the "0" on the thimble scale is aligned with the "104.4" on the "N•m" main scale.



2. Continue rotating the grip clockwise until the "1.4" on the Metric thimble scale is aligned with the center line on the "N•m" main scale. The wrench is now set at 105.8 N•m (104.4 + 1.4 = 105.8).

3. Put the lock ring in the lock position before using the wrench.

**IMPORTANT:** To prevent damage to the torque wrench, NEVER apply more torque than the rated capacity of the wrench.

## How to Apply Torque

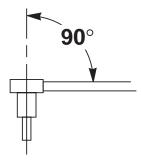
The Micrometer Torque Wrenches are designed to give an audible signal and/or impulse when force has been correctly applied to the hand grip, and the desired torque attained. Do NOT pull beyond this point.

#### **IMPORTANT:**

- The audible signal / impulse is an indicator that the correct torque has been reached. Over torquing beyond this point could cause fastener failure.
- Do NOT tilt the torque wrench handle during a torquing operation. Tilting the handle can result in inaccurate torque and/or over-torquing damage.

**NOTE:** When the wrench is set at the low end of the torque range, the degree of signal / impulse will be less than when the wrench is set at the high end of the range. Therefore, take special notice at the low end of the scale to hear the signal or feel the impulse.

- 1. Securely attach a socket to the torque wrench square drive.
- 2. Position the socket squarely on a fastener.
- 3. Grasp the center of the hand grip, and apply a force perpendicular (90 degrees) to the torque wrench body, and perpendicular (90 degrees) to the center line of the square drive, socket, and fastener.



**NOTE**: Maintain the common center line of the square drive, socket, and fastener while applying a steadily increasing force – this ensures an accurate torque reading.

4. Turn the fastener down using a smooth and even force applied to the handle of the torque wrench. As turning resistance increases, pull more slowly. To ensure accuracy, the fastener must be in motion when the torques measurement is made.