

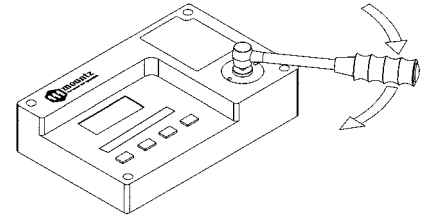
TSN (Cam-Over Wrench) Operating Instructions

Rev 1.0

Calibrating Torque Wrenches

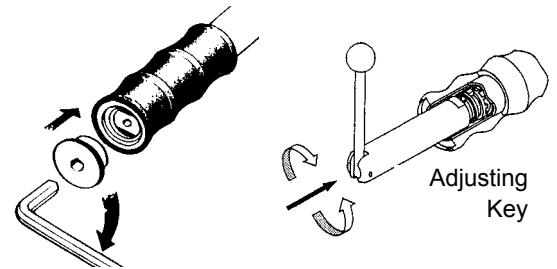
To calibrate torque wrenches either use a torque analyzer or torque transducer within the range of the torque wrench. For cam-over torque wrenches calibrate torque in "Peak" mode with an analyzer or transducer. Make sure you apply the torque slowly and smoothly.

1. Select a torque analyzer or transducer that covers the torque range of the TSN wrench. Connect wrench to the torque analyzer or transducer.
2. Apply torque clockwise slowly until wrench 'slips' and note reading.
3. Adjust wrench to required torque setting.
4. Test and repeat adjustment as necessary to obtain desired value.
5. Recalibrate torque wrench at prescribed intervals.



Adjusting Torque Setting

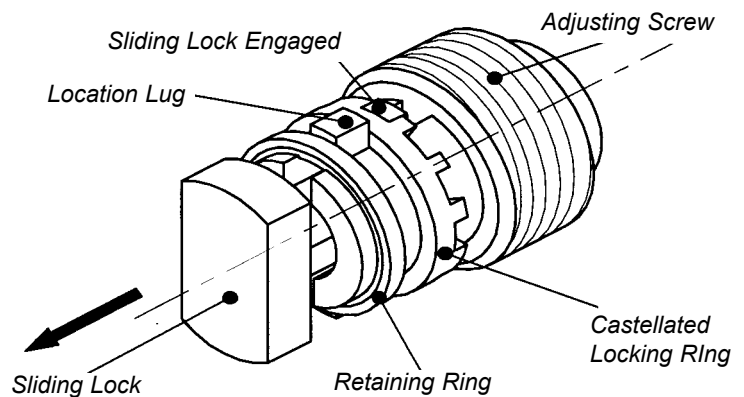
1. Remove end cap from wrench and insert special adjusting key.
2. The special Adjusting Key is an articulated design. When in use the two halves are set at 90°, this allows downward force to be exerted on the Sliding Lock while rotating the Adjusting Screw.
3. Turn clockwise to increase torque and counter clockwise to decrease torque. Do not adjust torque above or below the recommended torque ranges. Tighten end cap back on.



Construction & Operation of M-TALD System

The TSN wrenches now feature the new M-TALD (Mechanical Torque Adjustment Locking Device) system. The M-TALD is an easy to use locking device for adjusting the torque of the TSN. It's a positive, mechanical locking system that does not rely on friction for movement, and does not require a secondary locking device. It's operated using a single key.

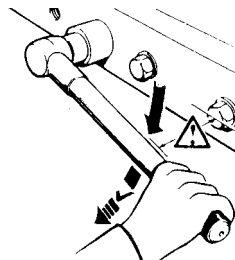
1. M-TALD comprises of three main parts: The Adjusting screw, the spring-loaded Sliding Lock and the Castellated Lock Ring. These are assembled into a single, self-contained unit and held together by a retaining ring.
2. The assembly is screwed into the wrench handle tube, with the location lugs of the Lock Ring engaging with specially formed grooves.
3. An inward force has to be exerted onto the Sliding Lock, through the special adjusting key, while the Adjusting Screw is being rotated.
4. As soon as the inward force is released, the spring-loaded Sliding Lock engages with the teeth of the Lock Ring, further rotation of the Adjusting Screw is not possible.
5. The Castellated Lock Ring has ten teeth, allowing the Adjusting Screw to be set at increments of 36°. The resolution of each increment varies with each model of the tool and are, generally, as follows:



TSN 25	0.15 Nm
TSN 55	0.6 Nm
TSN 125	1.0 Nm

Applying Torque

1. Tighten nut or bolt by applying a steady even pull using built in ratchet as necessary. Wrench should be kept at 90 degrees to axis of bolt during tightening. When pre-set torque is reached, the wrench will 'slip.'
2. The wrench will automatically reset itself for the next application.
3. With its unique design, it's impossible to over tighten beyond the preset load.



mountz
the torque tool specialists

800-456-1828
Fax: 408-292-2214

sales@etorque.com

www.etorque.com

