



TBX PRESET BREAK-OVER WRENCH OPERATING INSTRUCTIONS

Rev 2 (11/23/2022)

The TBX has no external adjustment scale and must be preset using a torque analyzer or torque sensor. If the tool has not been preset to a set torque value, then follow the directions for adjusting the torque setting before using the wrench.

Adjusting the Torque Setting for a Preset Value

1. Use a 1/4" hex key and remove the end cap from the wrench anti-clockwise direction.
2. Insert the 1/4" hex key into the torque adjuster mechanism and turn the hex key clockwise to increase torque and counter-clockwise to decrease torque.
3. Cycle wrench 10 times before taking readings.
4. Take 10 consistent readings on the Torque Analyzer to confirm the torque setting. Do not adjust torque above or below the recommended torque ranges for the torque wrench or torque analyzer. Hand tighten end-cap back on using a 1/4" hex key.



Example: TBX-25 ESD model

Note: Do not adjust the torque setting while the wrench is connected to a torque analyzer or torque sensor as you can over-torque and damage the sensor.

Placing Heads on Wrench

1. Slide "head" onto the end of the wrench. Align the pin with the head's pin slot.

Applying Torque

1. Grab the handle with the center area of the grip to apply torque. (If you the grab handle closer toward the head, you will apply more torque than the wrench's setting. The wrench is a length-dependent tool).
2. Tighten fastener or bolt by applying even pull. The wrench should be kept at 90 degrees to the axis of the bolt during tightening. When pre-set torque is reached, the wrench will 'break-over.'
3. The wrench will automatically reset itself for the next application.



Example:
TBX-12 ESD model



Example:
TBX-12 model

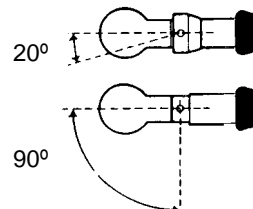
Calibrating Break-Over-Over Wrench

To calibrate break-over wrench, either use a torque analyzer or torque sensor within the torque wrench range. For break-over wrenches, calibrate torque in "Peak" mode with a torque tester or torque sensor. Make sure to apply the torque slowly and smoothly.

1. Select a torque tester or torque sensor that covers the torque range of the wrench. Connect the wrench to the torque tester or sensor and use the appropriate adapters.
2. Apply torque clockwise slowly until wrench 'breaks-over' and note reading.
3. Adjust wrench to required torque setting as described above.
4. Test and repeat adjustment as necessary to obtain desired torque value.
5. Recalibrate break-over wrench at prescribed intervals.

TBX-12 Stop Collar

TBX-12 model supplied with a removable stop collar, which restricts the "break" angle to 20°. If the collar is removed, the "break" angle increases to 90°.



Maintenance Schedule

Like an automobile, torque wrenches contain moving parts that require periodic servicing and lubrication.

Period Between Resetting of Torque

20,000 fastening operations. It is acknowledged that some tools may achieve 20,000 operations in a relatively short period of time. Under these circumstances, the user may decide, with the benefit of their experience, to increase the period between calibration intervals.

Routine Maintenance

After 60,000 operations, strip, clean, and re-grease the spring and internal components. Any worn parts should be replaced.

Note: Any tool that is dismantled during its life must be re-lubricated in accordance with the Mountz recommendations. Do not clean tools by immersing them in a solvent, as this will destroy the internal lubrication and cause the tool's failure.

Testing and Servicing

Torque tools go out of calibration with use. Calibrating a torque tool is a fine-tuning process of bringing the tool back within its tolerance. Regular torque calibration of a break-over wrench ensures accuracy, repeatable tool performance, and adherence to international standards.

We recommend a general once a year calibration interval. However, the user's organization must determine suitable intervals based upon equipment performance, application, degree of usage, and management objectives.

Mountz Calibration and Repair Services

Mountz Inc. features an experienced calibration and repair staff. Our trained technicians can calibrate and repair almost any tool. Mountz provides rapid service with quality that you can trust as we offer two state-of-the-art calibration labs and repair facilities that can calibrate up to 20,000 lbf.ft.

About Mountz

Mountz, The Torque Tool Specialists[®], has been a leader in the torque tool industry for over 57 years. Engineered in Silicon Valley and serving the globe, Mountz focuses on delivering high-quality torque products, services, and solutions to ensure customers can always proceed with confidence. We are committed to forging a safer world through precision and accuracy and by innovating every day.